STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 95235

TO: Shahnam J Sharareh **Location: 2b19 / 3d13** **W dnesday, June 04, 2003** **Art Unit: 1617** **Phone: 306-5400** **Serial Number: 09 / 899629**	**From: Jan Delaval** **Location: Biotech-Chem Library** **CM1-1E07** **Phone: 308-4498** **jan.delaval@uspto.gov**

Search Notes

Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

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=> fil reg
FILE 'REGISTRY' ENTERED AT 07:29:05 ON 04 JUN 2003
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STRUCTURE FILE UPDATES:    2 JUN 2003  HIGHEST RN 524673-75-4
DICTIONARY FILE UPDATES:   2 JUN 2003  HIGHEST RN 524673-75-4

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d l45 sqide can tot

L45  ANSWER 1 OF 7  REGISTRY  COPYRIGHT 2003 ACS
RN   250614-40-5  REGISTRY
CN   Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-
     1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]
     acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-
     phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI)  (CA INDEX NAME)
FS   PROTEIN SEQUENCE
SQL  10,5,5
NTE  multichain
     cyclic,cyclic
     modified (modifications unspecified)
```

type	------ location ------		description
bridge	Lys-5	- Lys-5'	covalent bridge, dimer
stereo	Phe-4	-	D
stereo	Phe-4'	-	D

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HITS AT:   1-4, 5

SEQ      1 RGDFK
           =====
HITS AT:   1-4, 5

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**
MF   C75 H108 In N23 O23 . 2 H
CI   CCS
SR   CA
LC   STN Files:   CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
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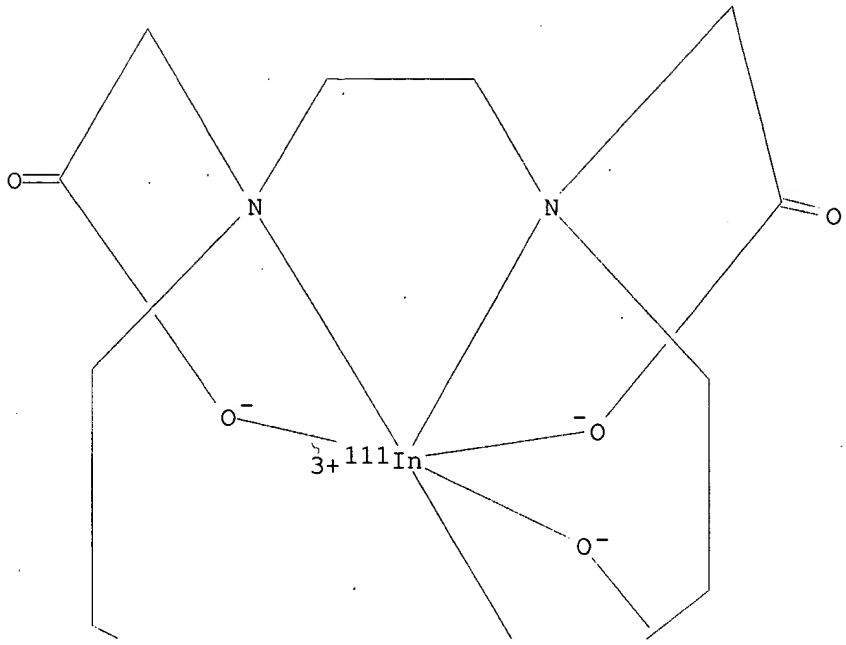
Jan Delaval
Reference Librarian
Biotechnology & Chemical Library
CM1 1E07 – 703-308-4498
jan.delaval@uspto.gov

PAGE 1-A



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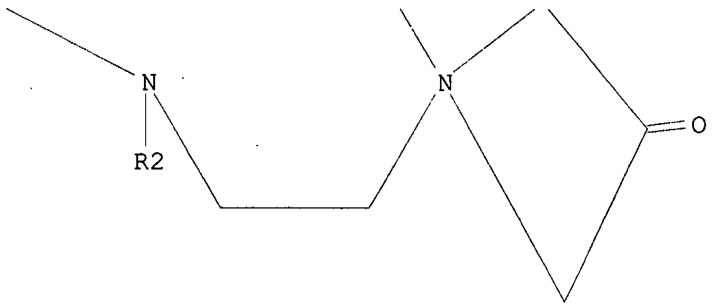
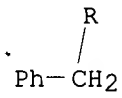
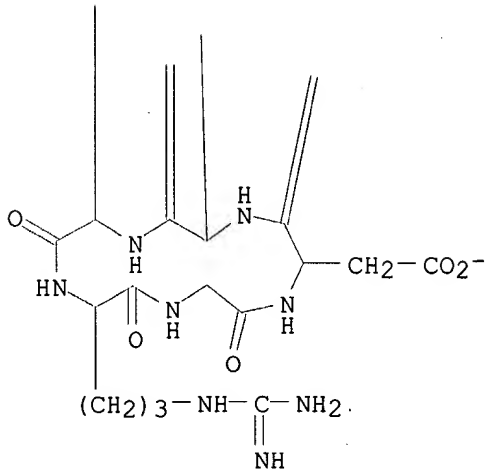




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



PAGE 4-A

●2 H^+

5 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:255514

REFERENCE 2: 137:140780

REFERENCE 3: 137:109487

REFERENCE 4: 136:70083

REFERENCE 5: 131:351678

L45 ANSWER 2 OF 7 REGISTRY COPYRIGHT 2003 ACS
RN 250614-39-2 REGISTRY
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE
SQL **10,5,5**
NTE **multichain**
cyclic,cyclic
modified (modifications unspecified)

type	------ location ------		description
bridge	Lys-5	- Lys-5'	covalent bridge, dimer
stereo	Phe-4	-	D
stereo	Phe-4'	-	D

SEQ 1 RGDFK
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HITS AT: 1-4, 5

SEQ 1 RGDFK
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HITS AT: 1-4, 5

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF **C75 H108 Lu N23 O23 . 2 H**
CI CCS
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

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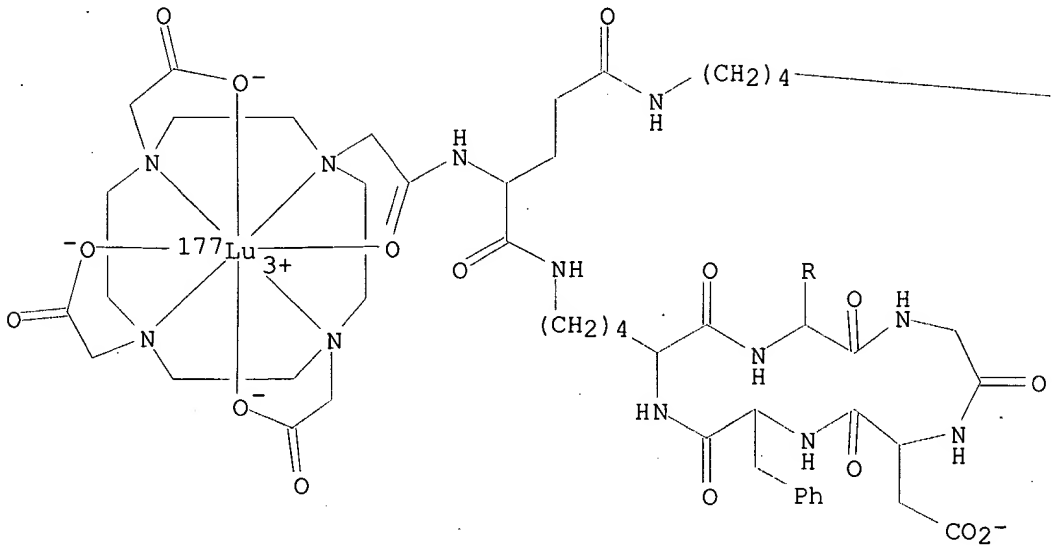

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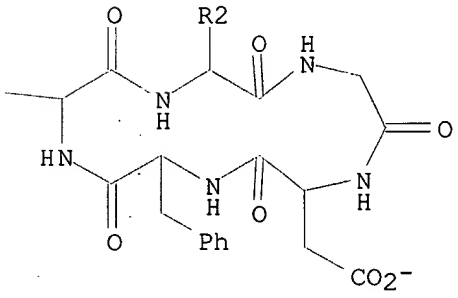

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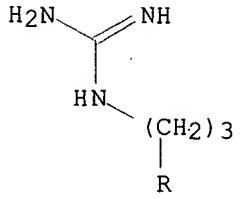

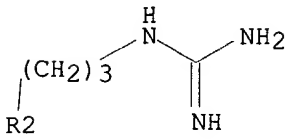

●2 H^+

6 REFERENCES IN FILE CA (1957 TO DATE)
6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:255514

REFERENCE 2: 137:140780

REFERENCE 3: 137:109487

REFERENCE 4: 136:70083

REFERENCE 5: 135:177368

REFERENCE 6: 131:351678

L45 ANSWER 3 OF 7 REGISTRY COPYRIGHT 2003 ACS
RN **250614-38-1** REGISTRY
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)
OTHER NAMES:
CN RP 697
FS PROTEIN SEQUENCE
SQL **10,5,5**
NTE multichain
cyclic,cyclic
modified (modifications unspecified)

type	------ location ------		description
bridge	Lys-5	- Lys-5'	covalent bridge, dimer
stereo	Phe-4	-	D
stereo	Phe-4'	-	D

SEQ 1 RGDFK

SEQ 1 RGDFK

RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF **C75 H108 N23 O23 Y . 2 H**
CI CCS
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

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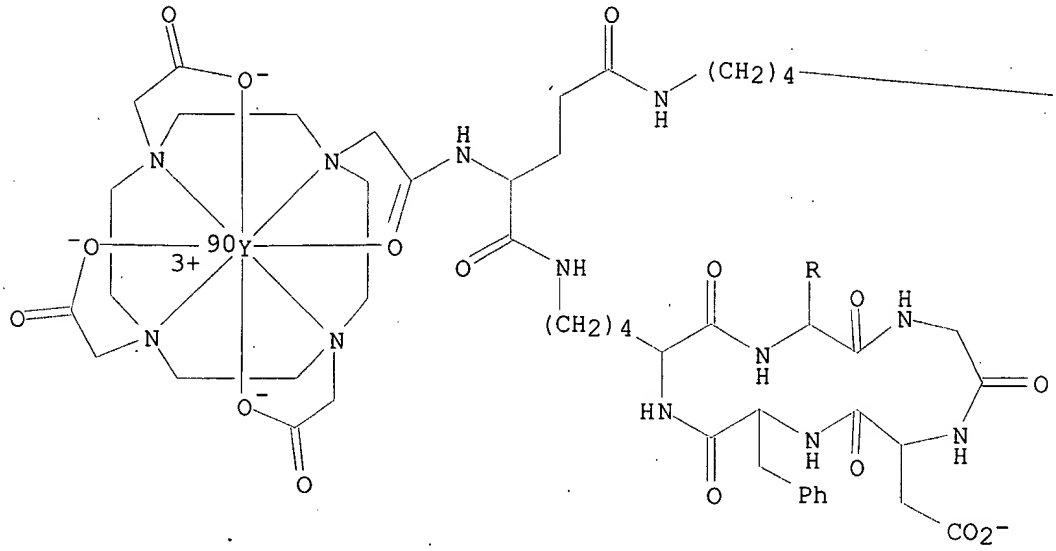

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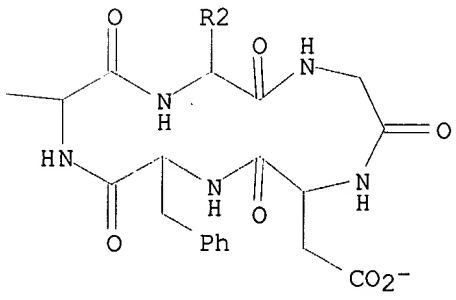

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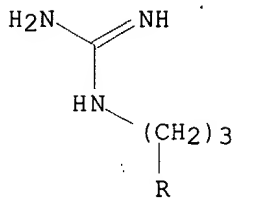

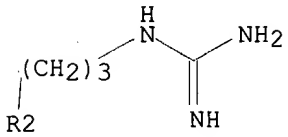

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8 REFERENCES IN FILE CA (1957 TO DATE)
8 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:255514

REFERENCE 2: 137:140780

REFERENCE 3: 137:109487

REFERENCE 4: 136:123597

REFERENCE 5: 136:70083

REFERENCE 6: 135:185318

REFERENCE 7: 135:177368

REFERENCE 8: 131:351678

L45 ANSWER 4 OF 7 REGISTRY COPYRIGHT 2003 ACS
RN **250612-82-9** REGISTRY
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10,5,5**
NTE **multichain**
cyclic,cyclic
modified (modifications unspecified)

type	------ location ------		description
bridge	Lys-5	- Lys-5'	covalent bridge, dimer
stereo	Phe-4	-	D
stereo	Phe-4'	-	D

SEQ 1 RGDFK
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HITS AT: 1-4, 5

SEQ 1 RGDFK
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HITS AT: 1-4, 5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

MF **C87 H137 N23 O23 . 2 C2 H F3 O2**

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

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CRN 250612-81-8

CMF C87 H137 N23 O23

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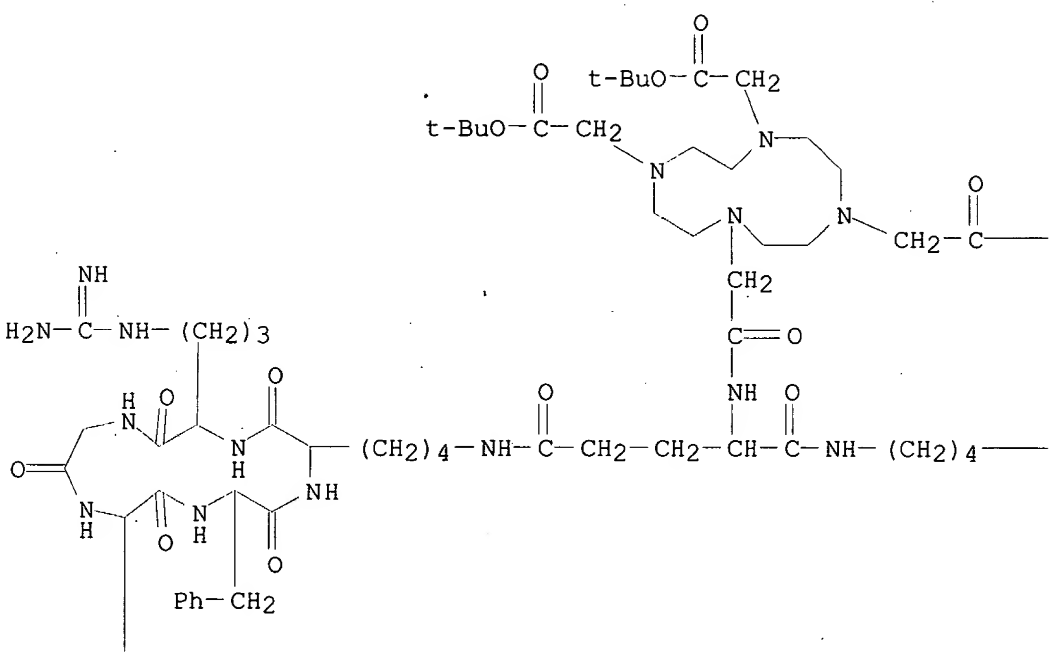

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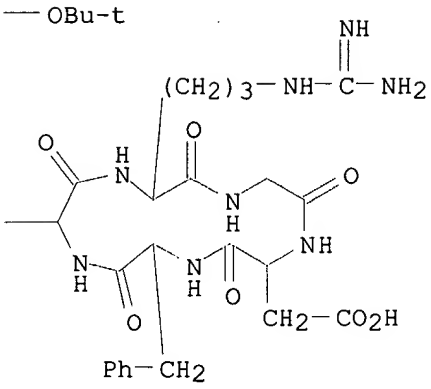

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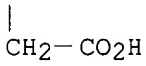

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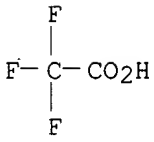

6 REFERENCES IN FILE CA (1957 TO DATE)
6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:255514

REFERENCE 2: 137:140780

REFERENCE 3: 137:109487

REFERENCE 4: 136:123597

REFERENCE 5: 136:70083

REFERENCE 6: 131:351678

L45 ANSWER 5 OF 7 REGISTRY COPYRIGHT 2003 ACS

RN 250612-81-8 REGISTRY
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10,5,5**
NTE **multichain**
cyclic,cyclic
modified (modifications unspecified)

type	------ location ------		description
bridge	Lys-5	- Lys-5'	covalent bridge, dimer
stereo	Phe-4	-	D
stereo	Phe-4'	-	D

SEQ 1 RGDFK
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HITS AT: 1-4, 5

SEQ 1 RGDFK
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HITS AT: 1-4, 5

RELATED SEQUENCES AVAILABLE WITH SEQLINK
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SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

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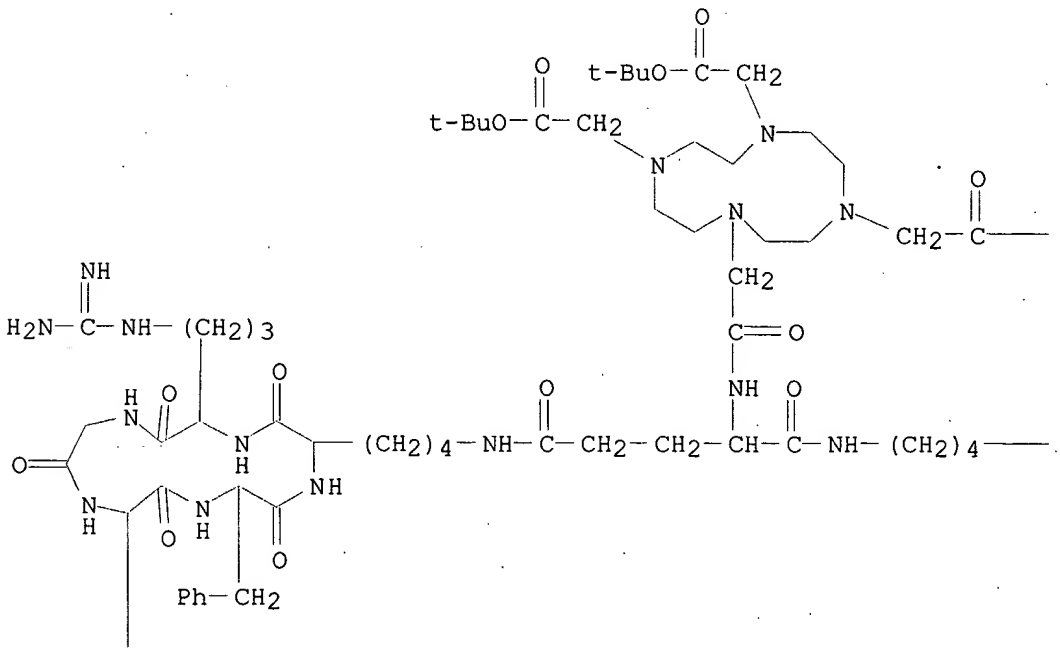

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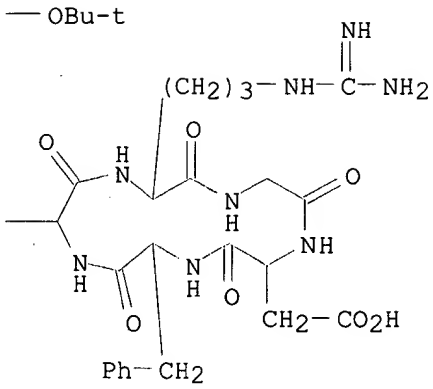

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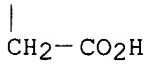

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1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:177368

L45 ANSWER 6 OF 7 REGISTRY COPYRIGHT 2003 ACS
RN **250612-07-8** REGISTRY
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10,5,5**
NTE **multichain**
cyclic,cyclic
modified (modifications unspecified)

type	location		description
bridge	Lys-5	- Lys-5'	covalent bridge, dimer
stereo	Phe-4	-	D
stereo	Phe-4'	-	D

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HITS AT: 1-4, 5

SEQ 1 RGDFK
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HITS AT: 1-4, 5

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SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

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CMF C75 H113 N23 O23

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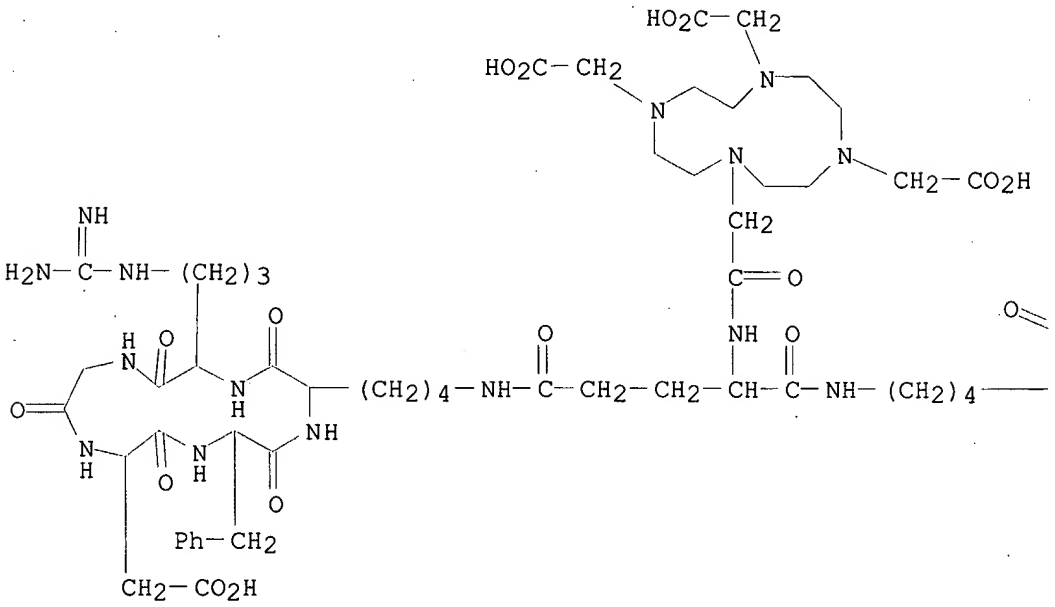

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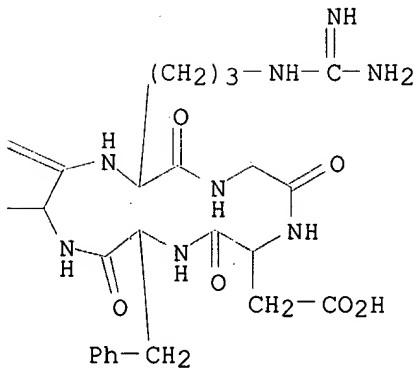

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CRN 76-05-1
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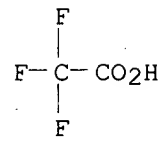

6 REFERENCES IN FILE CA (1957 TO DATE)
6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:255514

REFERENCE 2: 137:140780

REFERENCE 3: 137:109487

REFERENCE 4: 136:123597

REFERENCE 5: 136:70083

REFERENCE 6: 131:351678

L45 ANSWER 7 OF 7 REGISTRY COPYRIGHT 2003 ACS
RN **250612-06-7** REGISTRY
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN SU 015
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **10,5,5**
NTE **multichain**
cyclic,cyclic
modified (modifications unspecified)

type	------ location ------		description
bridge	Lys-5	- Lys-5'	covalent bridge, dimer
stereo	Phe-4	-	D
stereo	Phe-4'	-	D

SEQ 1 RGDFK
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HITS AT: 1-4, 5

SEQ 1 RGDFK
=====
HITS AT: 1-4, 5

RELATED SEQUENCES AVAILABLE WITH SEQLINK
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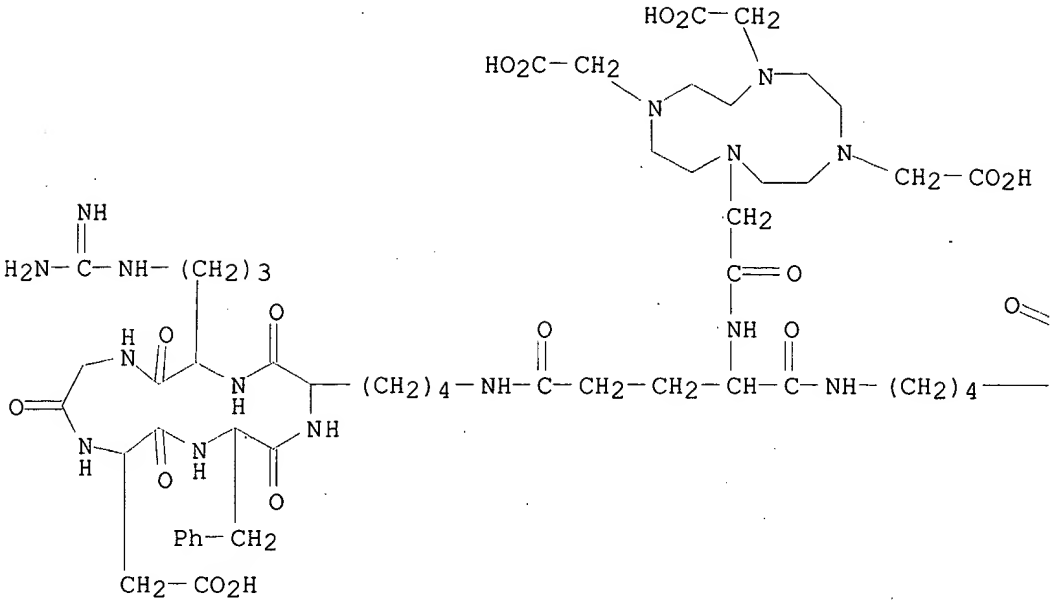
CI COM
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

PAGE 1-A



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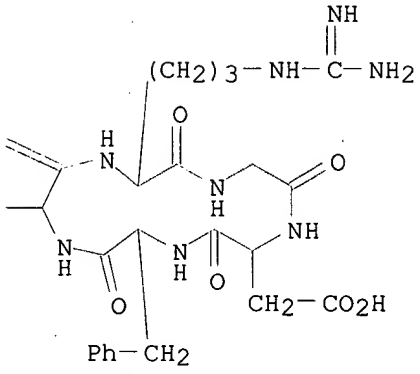

5 REFERENCES IN FILE CA (1957 TO DATE)
5 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 138:255514

REFERENCE 2: 136:70083

REFERENCE 3: 135:185318

REFERENCE 4: 135:177368

REFERENCE 5: 131:351678

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CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 07:29:35 ON 04 JUN 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l52 bib abs hitstr tot

L52 ANSWER 1 OF 14 USPATFULL
AN 2003:123076 USPATFULL
TI Vitronectin receptor antagonist pharmaceuticals
IN Cheesman, Edward H., Lunenberg, MA, United States
Sworin, Michael, Tyngsboro, MA, United States
Rajopadhye, Milind, Westford, MA, United States
PA Bristol-Myers Squibb Pharma Company, Princeton, NJ, United States (U.S. corporation)
PI US 6558649 B1 20030506
AI US 1999-466582 19991217 (9)
PRAI US 1998-112831P 19981218 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dameron L.
LREP Woodcock Washburn LLP
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 4950
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The present invention further provides novel compounds useful for imaging atherosclerosis, restenosis, cardiac ischemia and myocardial reperfusion injury. The present invention still further provides novel compounds useful for the treatment of rheumatoid arthritis. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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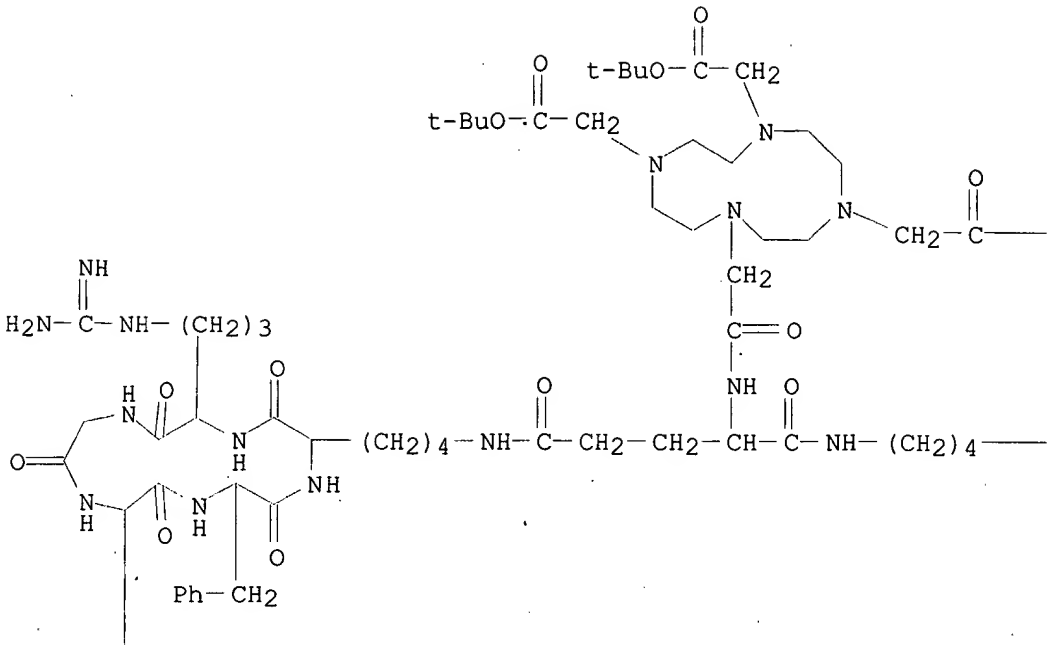
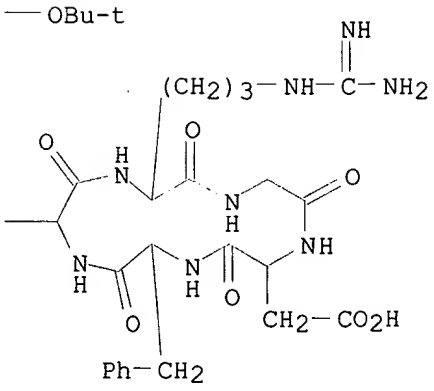
CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



PAGE 1-B



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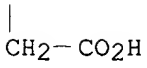
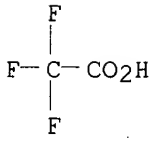


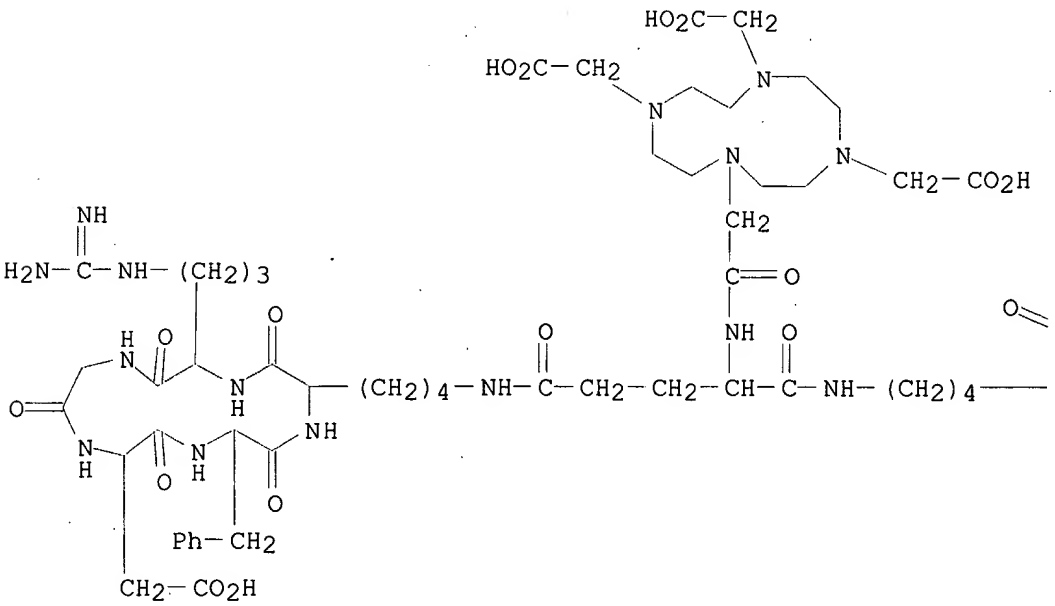
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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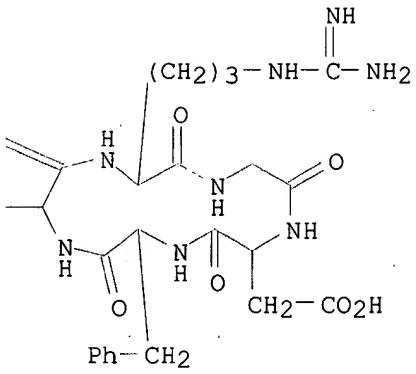
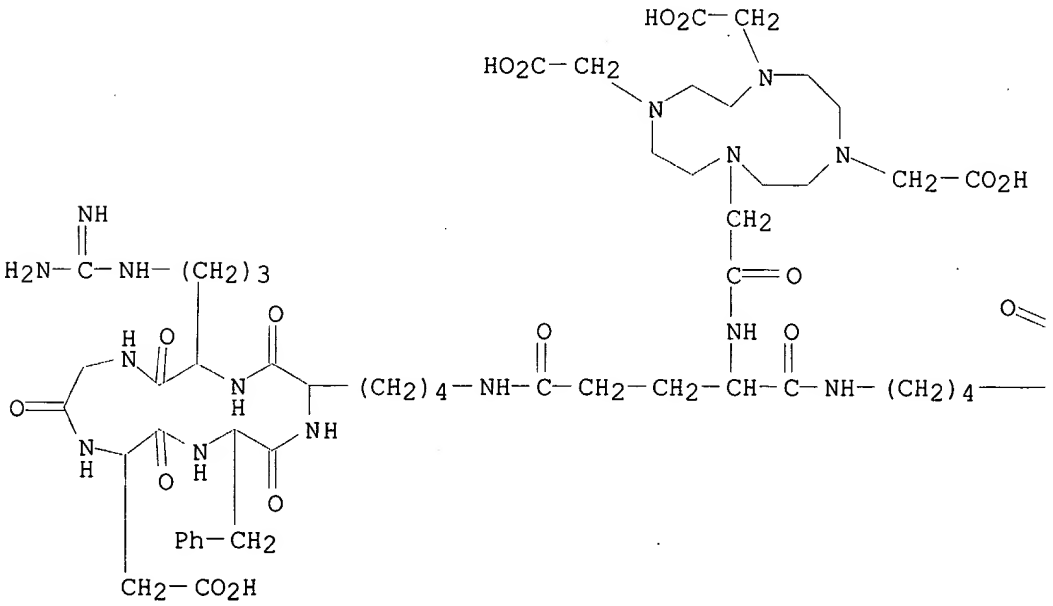


RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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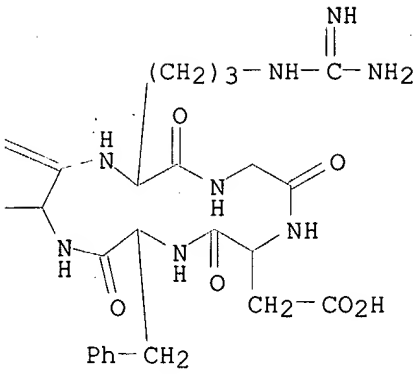
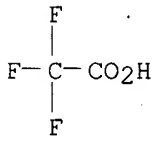


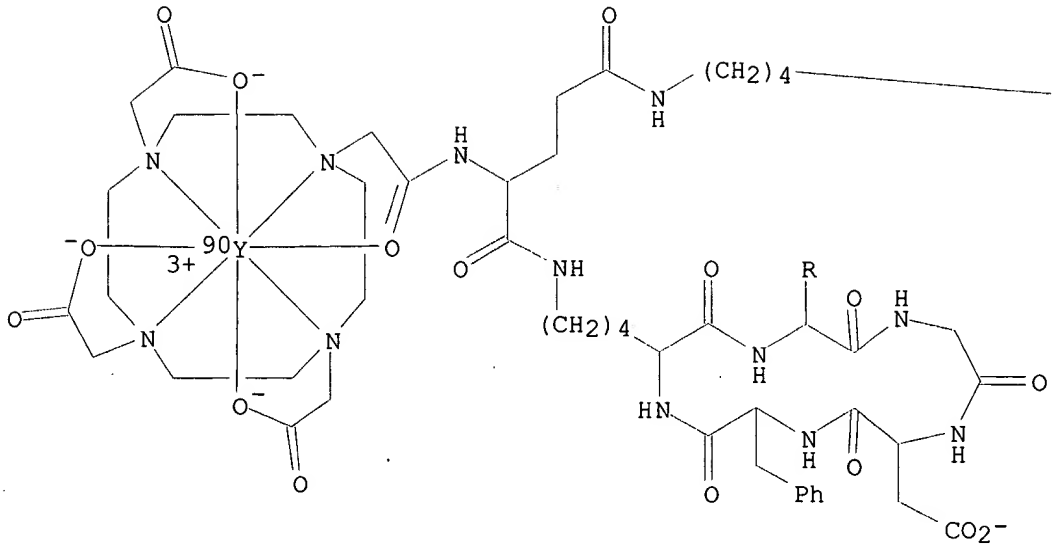
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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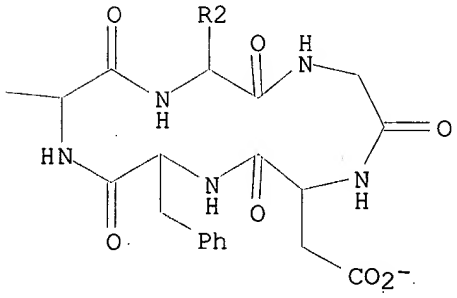
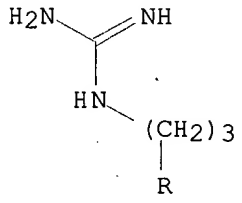
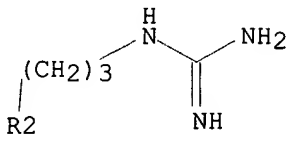


PAGE 2-A

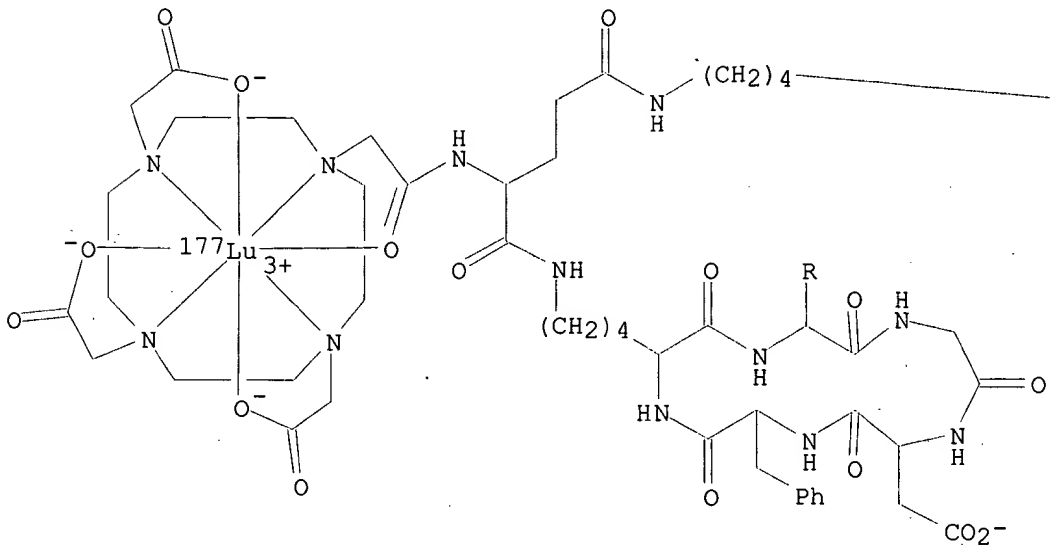




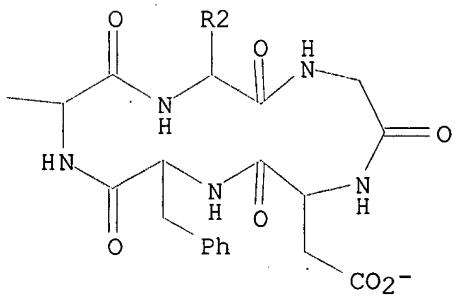
2 H^+

RN 250614-39-2 USPATFULL
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

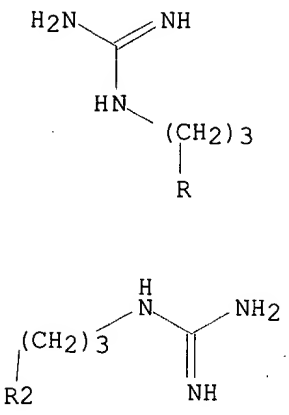
PAGE 1-A



PAGE 1-B

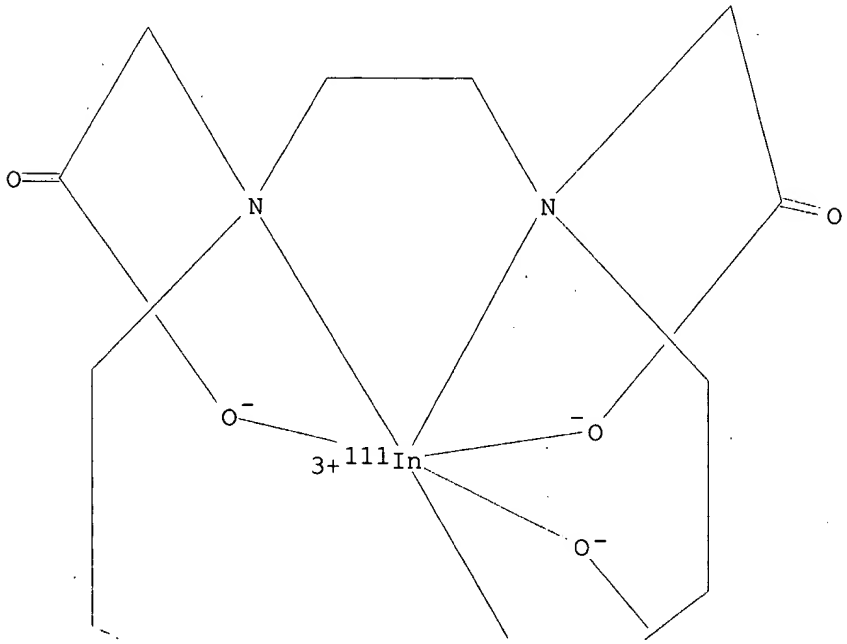


PAGE 2-A

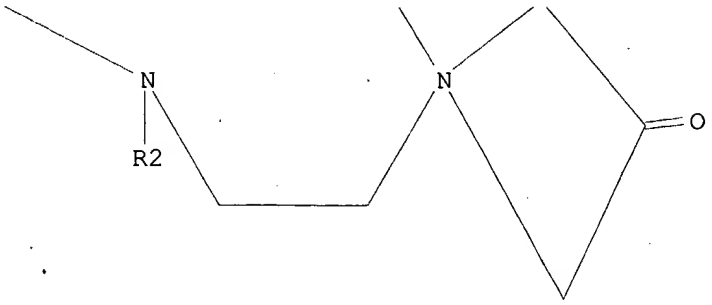


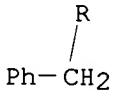
RN 250614-40-5 USPATFULL
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



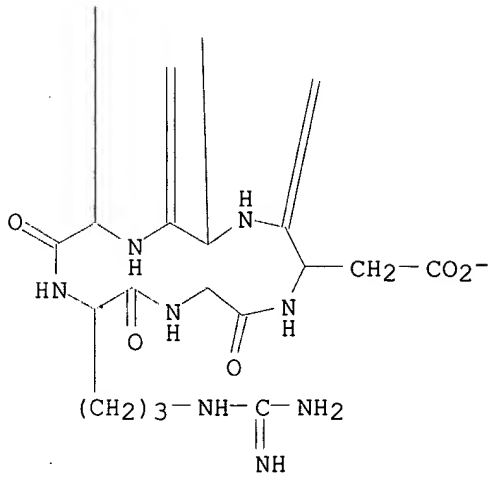
PAGE 2-A





* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 4-A



2 H^+

L52 ANSWER 2 OF 14 USPATFULL
AN 2003:102466 USPATFULL
TI Benzodiazepine vitronectin receptor antagonist pharmaceuticals
IN Cheesman, Edward H, Lunenberg, MA, United States

Sworin, Michael, Tyngsboro, MA, United States
PA Bristol-Myers Squibb Pharma Company, Princeton, NJ, United States (U.S. corporation)
PI US 6548663 B1 20030415
AI US 1999-281050 19990330 (9)
PRAI US 1998-112715P 19981218 (60)
US 1998-112829P 19981218 (60)
US 1998-112732P 19981218 (60)
US 1998-112831P 19981218 (60)
US 1998-80150P 19980331 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Raymond, Richard L.; Assistant Examiner: Balasubramanian, Venkataraman
LREP Woodcock Washburn LLP
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 4239
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

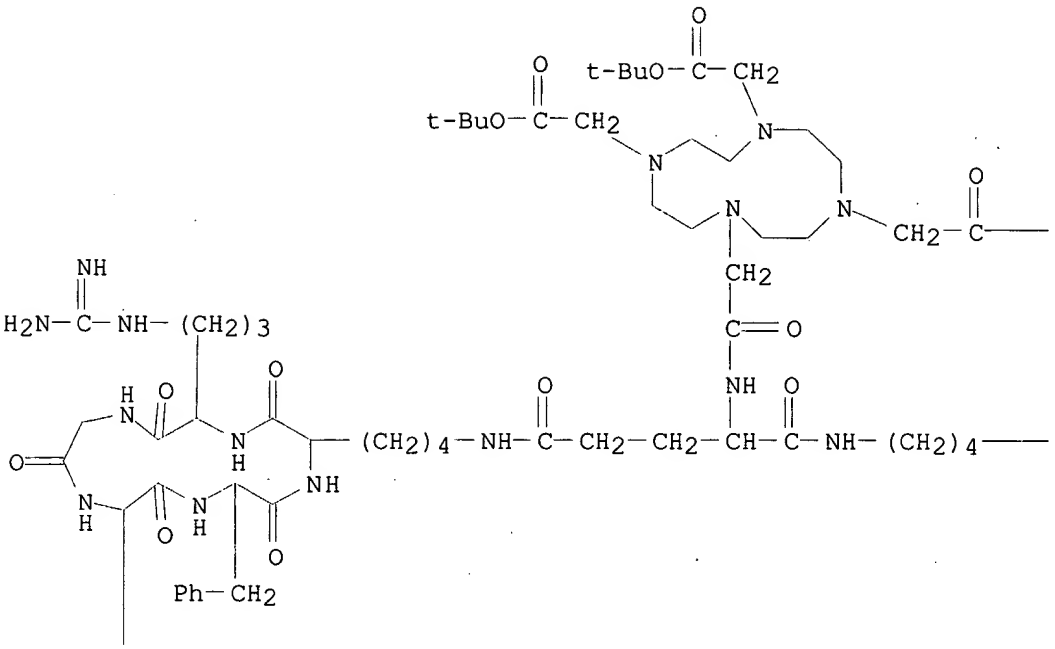
useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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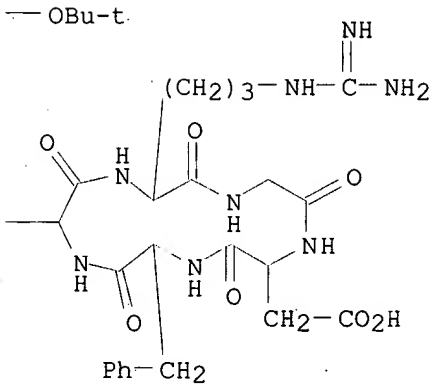
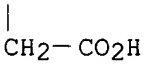
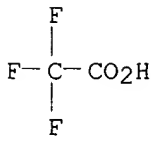


PAGE 2-A



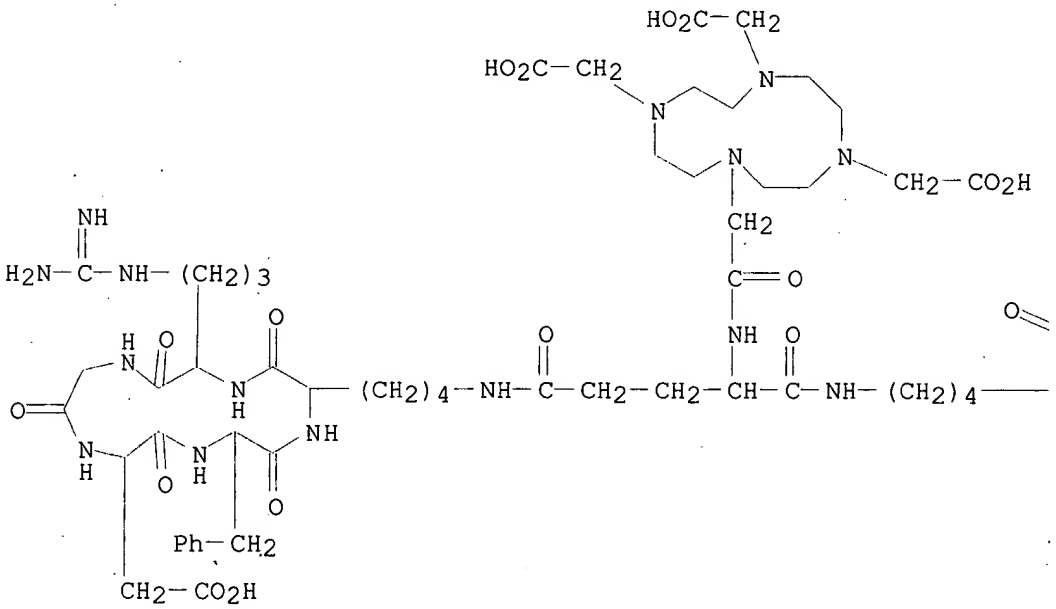
CM 2

CRN 76-05-1
CMF C2 H F3 O2

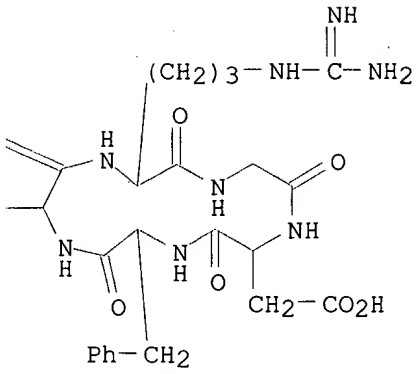


IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

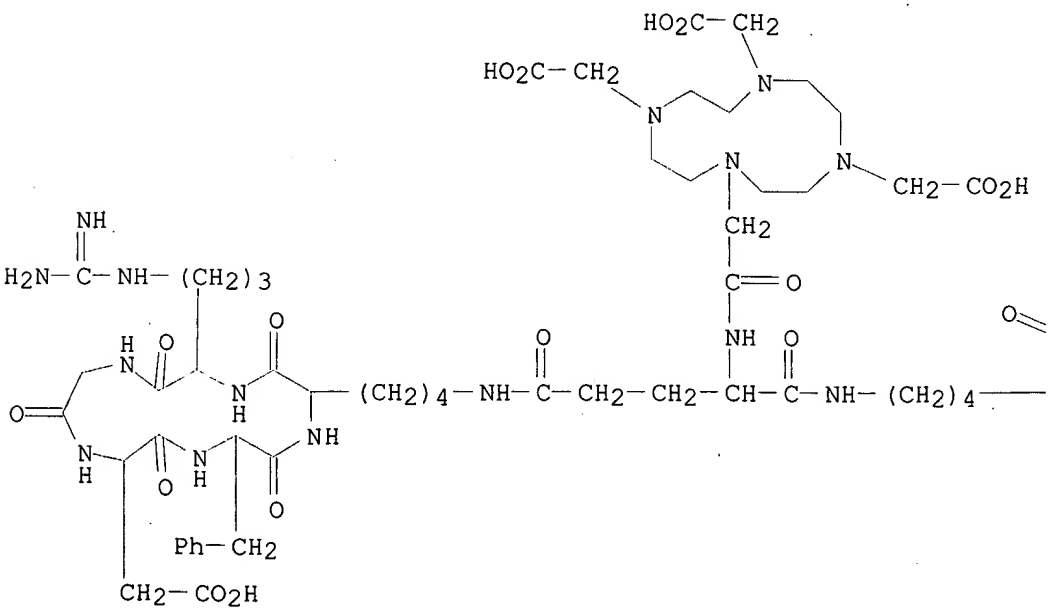


RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

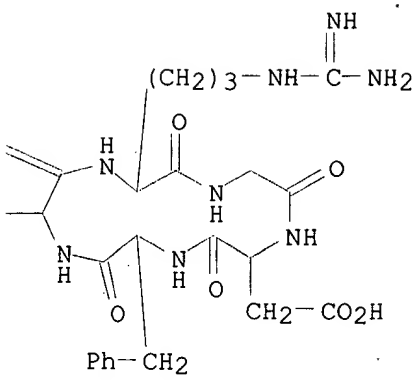
CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A

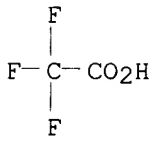


PAGE 1-B



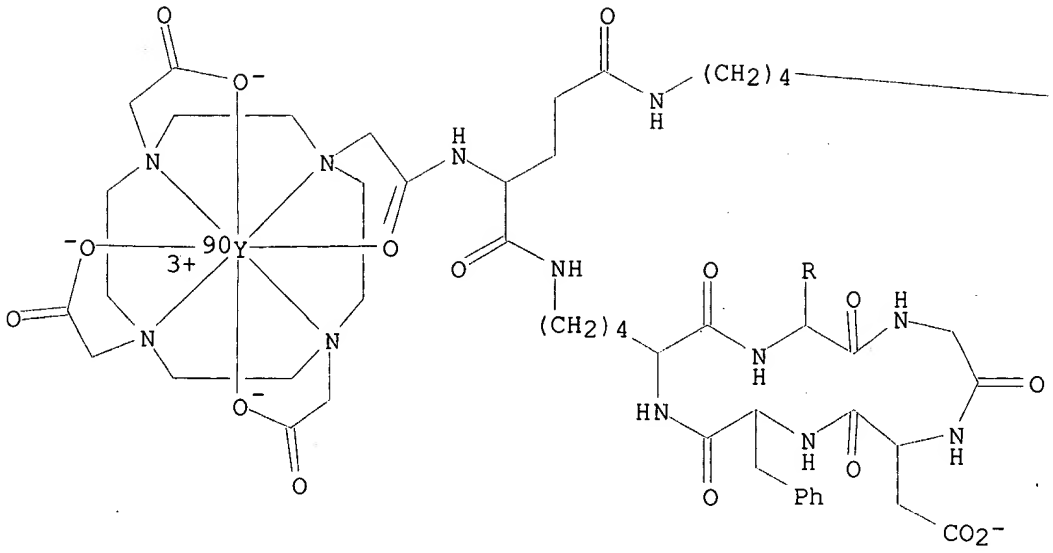
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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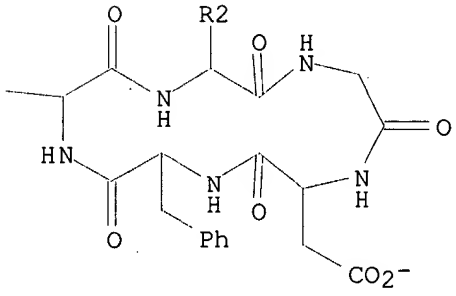
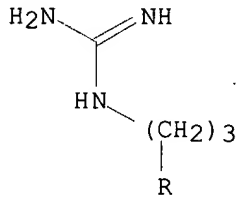
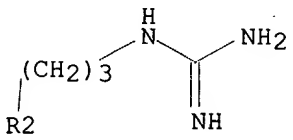


PAGE 2-A

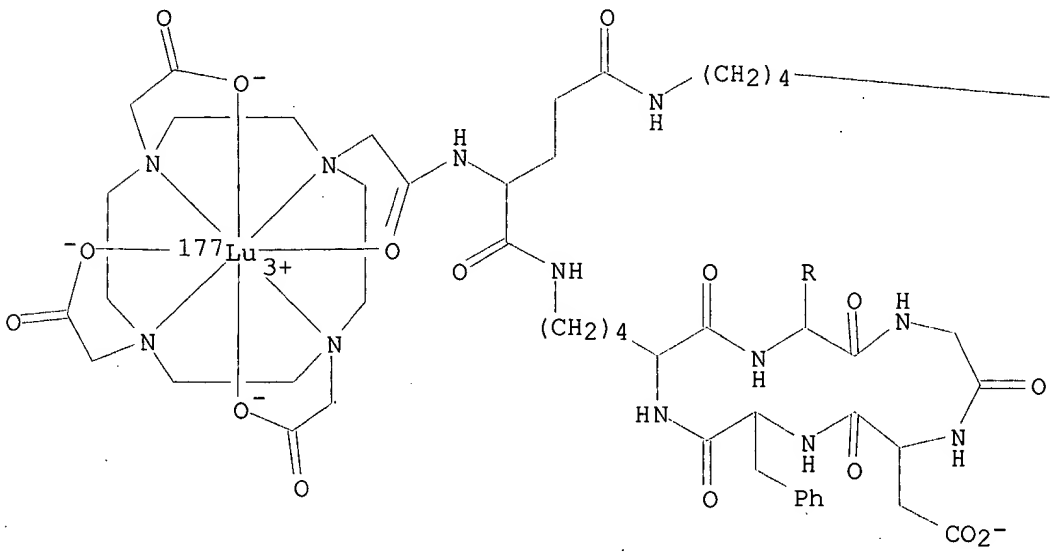




2 H^+

RN 250614-39-2 USPATFULL
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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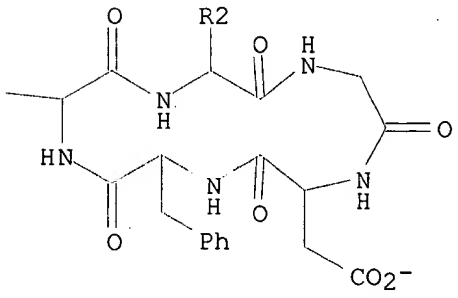

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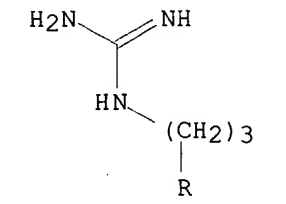
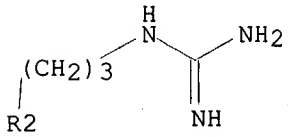
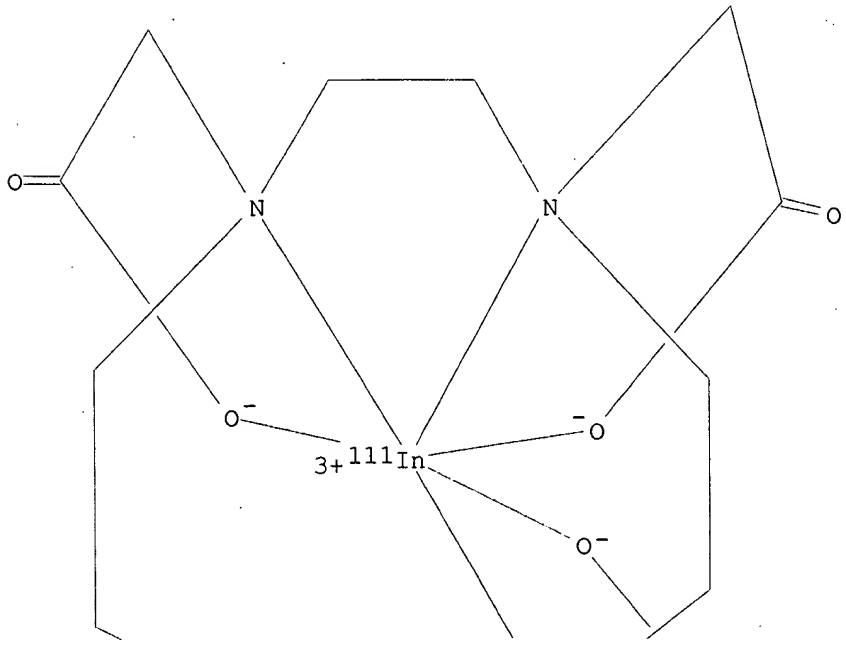




● 2 H^+

RN 250614-40-5 USPATFULL
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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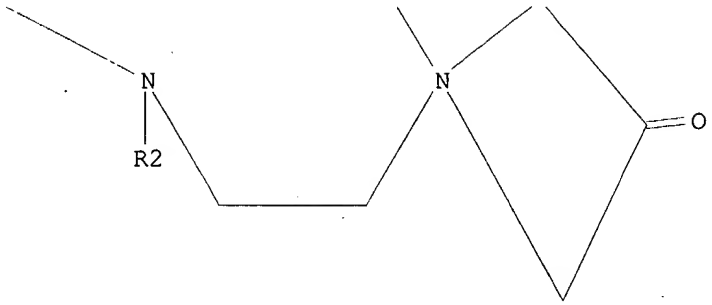
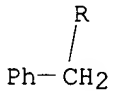
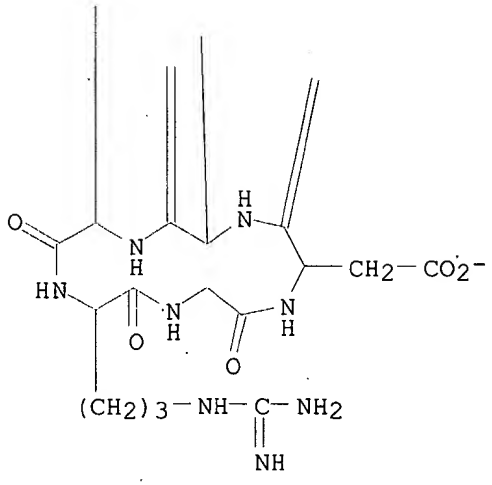




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 4-A



2 H^+

L52 ANSWER 3 OF 14 USPATFULL
AN 2003:81434 USPATFULL
TI Pharmaceuticals for the imaging of angiogenic disorders
IN Rajopadhye, Milind, Westford, MA, United States

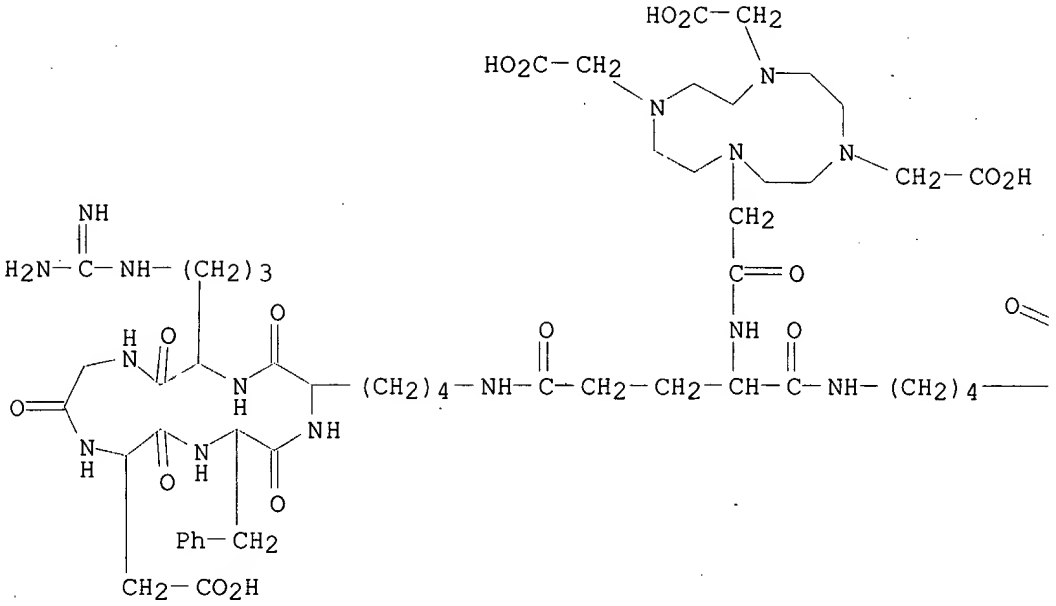
Edwards, D. Scott, Burlington, MA, United States
Barrett, John A., Groton, MA, United States
Carpenter, Jr., Alan P., Carlisle, MA, United States
Harris, Thomas D., Samel, NH, United States
Heminway, Stuart J., Lowell, MA, United States
Liu, Shuang, Chelmsford, MA, United States
Singh, Prahlad R., Arlington, MA, United States
PA Bristol-Myers Squibb Pharma Company, Princeton, NJ, United States (U.S. corporation)
PI US 6537520 B1 20030325
AI US 2000-599295 20000621 (9)
RLI Continuation-in-part of Ser. No. US 1999-281474, filed on 30 Mar 1999
PRAI US 1998-112715P 19981218 (60)
US 1998-80150P 19980331 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dameron L.
LREP Golian, Paul D.
CLMN Number of Claims: 37
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 6846
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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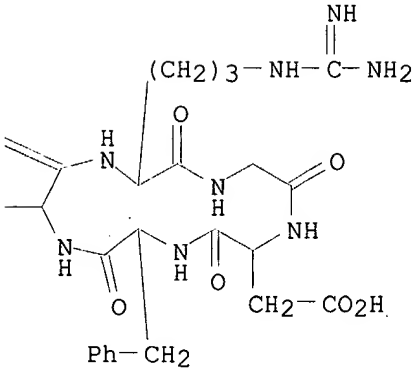

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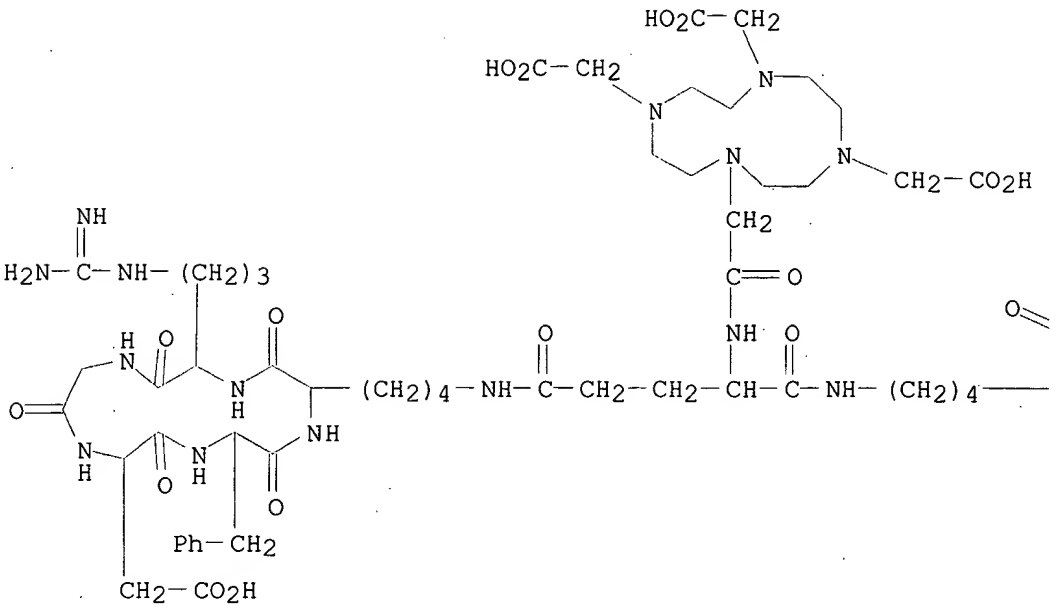
CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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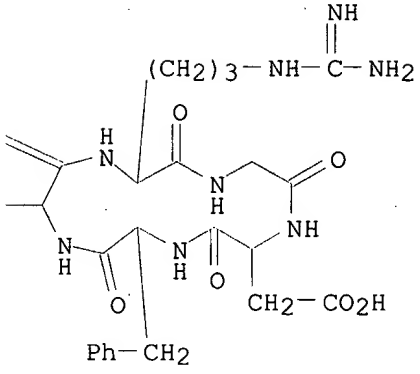

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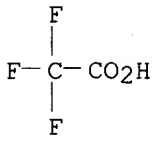
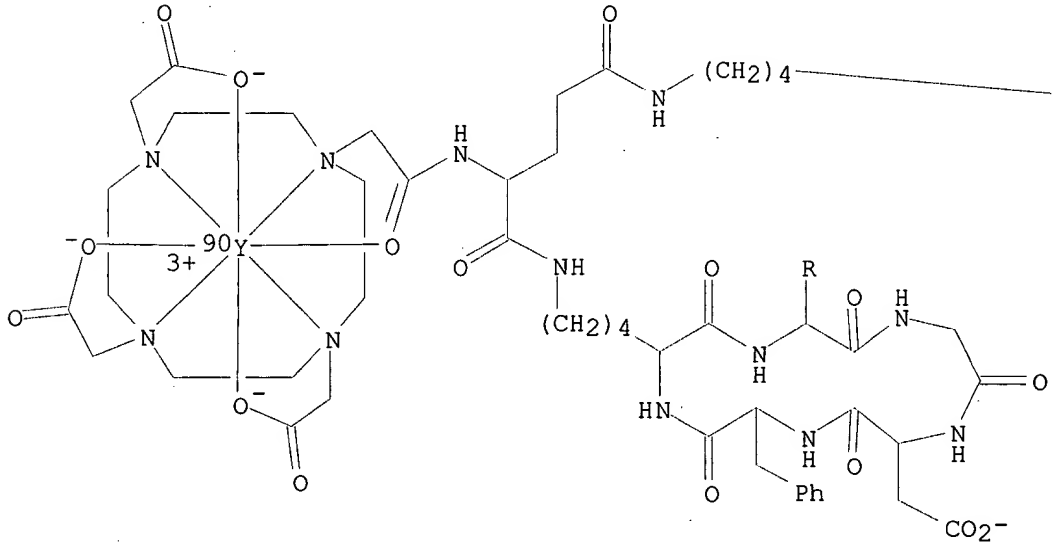
CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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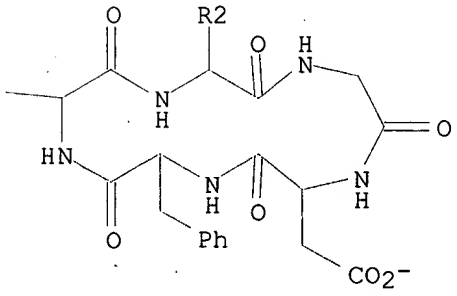

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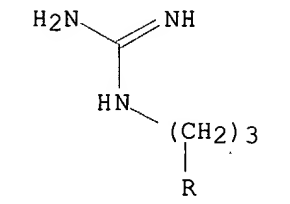
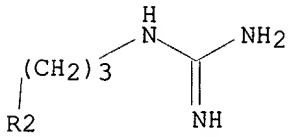
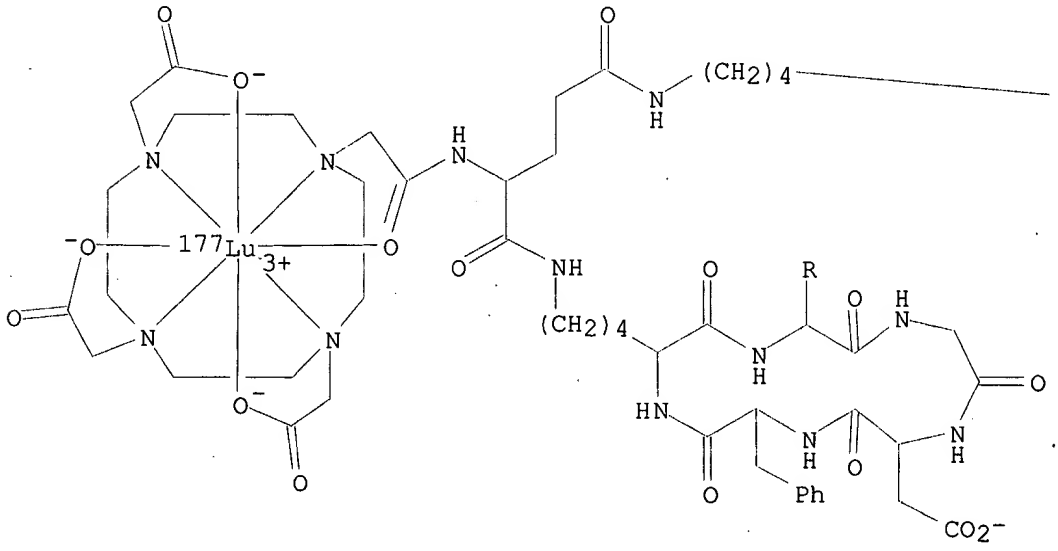




●2 H^+

RN 250614-39-2 USPATFULL
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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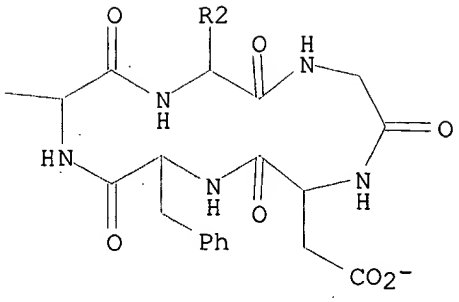

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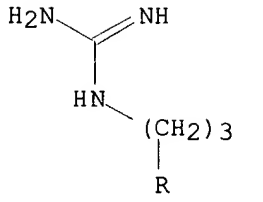

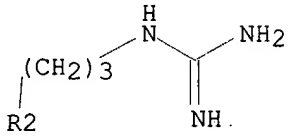

●2 H^+

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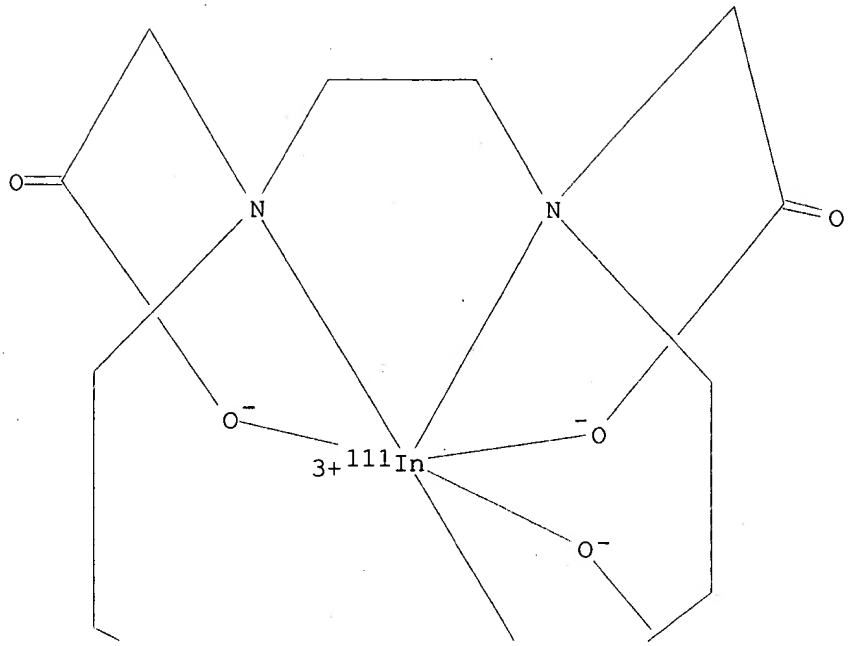
PAGE 1-A



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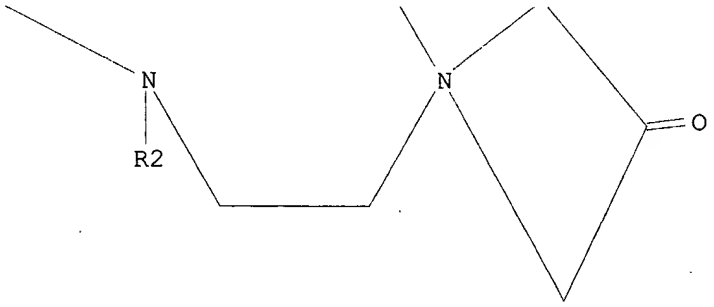

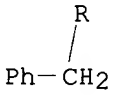

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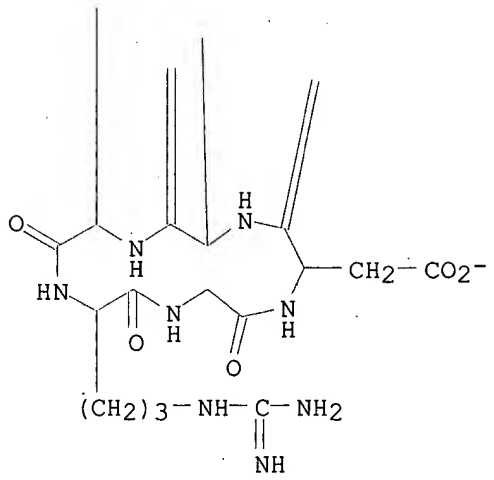


PAGE 4-A

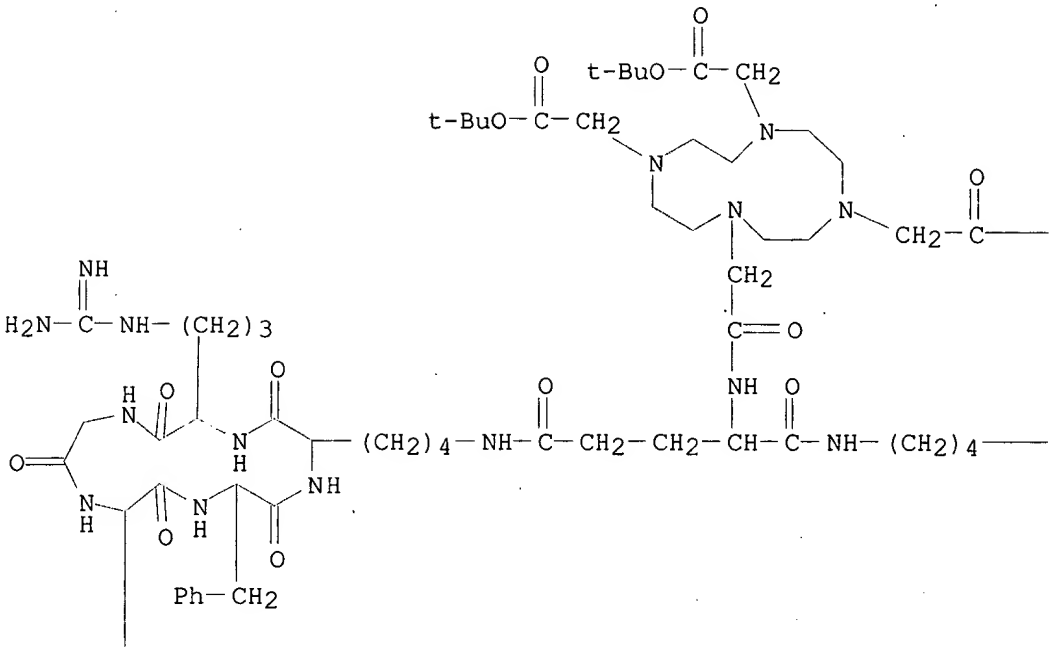
●2 H^+

IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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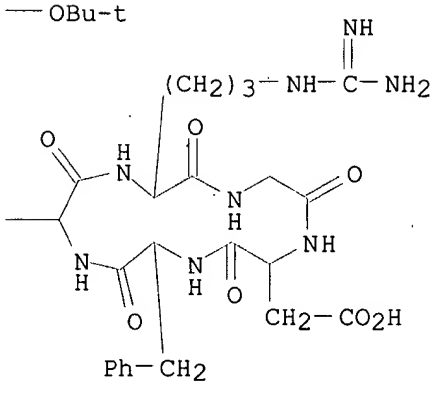

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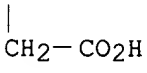

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CRN 76-05-1
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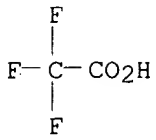

IT **10098-91-6**, y90, biological studies
(radioisotope for use with peptide derivs. for the treatment of cancer in combination therapy)
RN 10098-91-6 USPATFULL
CN Yttrium, isotope of mass 90 (8CI, 9CI) (CA INDEX NAME)

^{90}Y

L52 ANSWER 4 OF 14 USPATFULL
AN 2002:321986 USPATFULL
TI VITRONECTIN RECEPTOR ANTAGONIST PHARMACEUTICALS
IN HARRIS, THOMAS D., SALEM, NH, UNITED STATES
RAJOPADHYE, MILIND, WESTFORD, MA, UNITED STATES
PI US 2002182147 A1 20021205
US 6511648 B2 20030128
AI US 1999-465300 A1 19991217 (9)
PRAI US 1998-112732P 19981218 (60)
DT Utility
FS APPLICATION
LREP BRISTOL-MYERS SQUIBB PHARMA COMPANY, PATENT DEPARTMENT, P.O. BOX 4000, PRINCETON, NJ, 08543-4000
CLMN Number of Claims: 57
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 7362
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The present invention further provides novel compounds useful for imaging atherosclerosis, restenosis, cardiac ischemia, and myocardial reperfusion injury. The present invention still further provides novel compounds useful for the treatment of rheumatoid arthritis. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
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CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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CMF C87 H137 N23 O23

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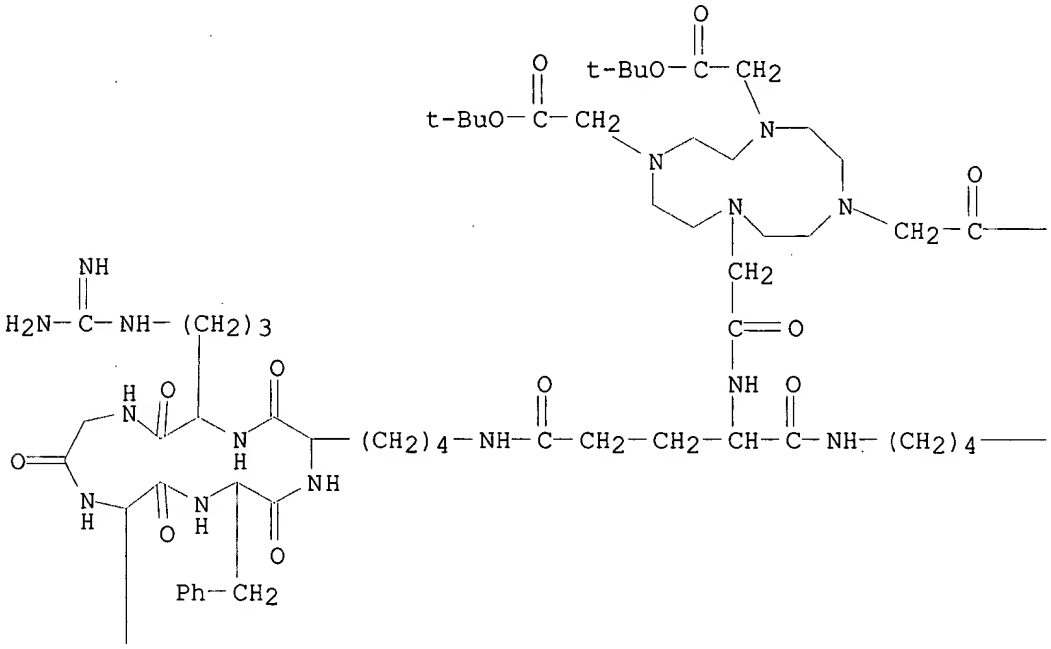

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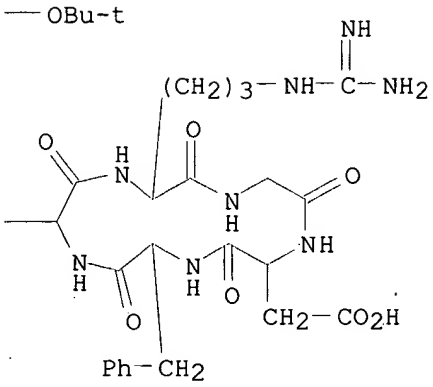

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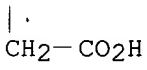

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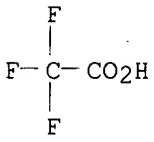
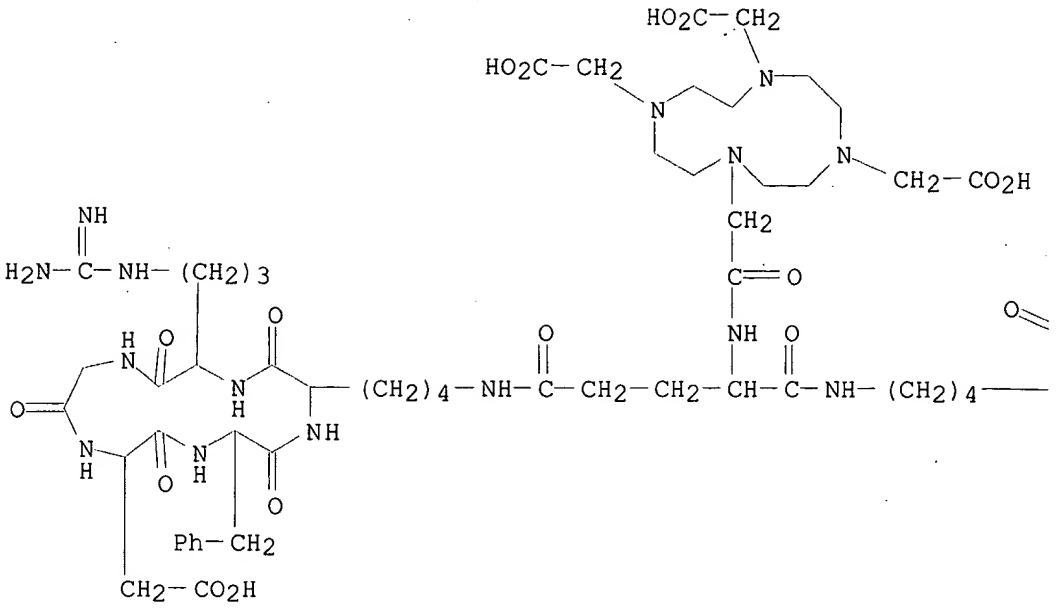


IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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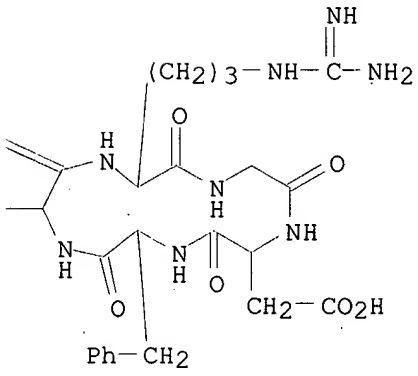

RN 250612-07-8 USPATFULL
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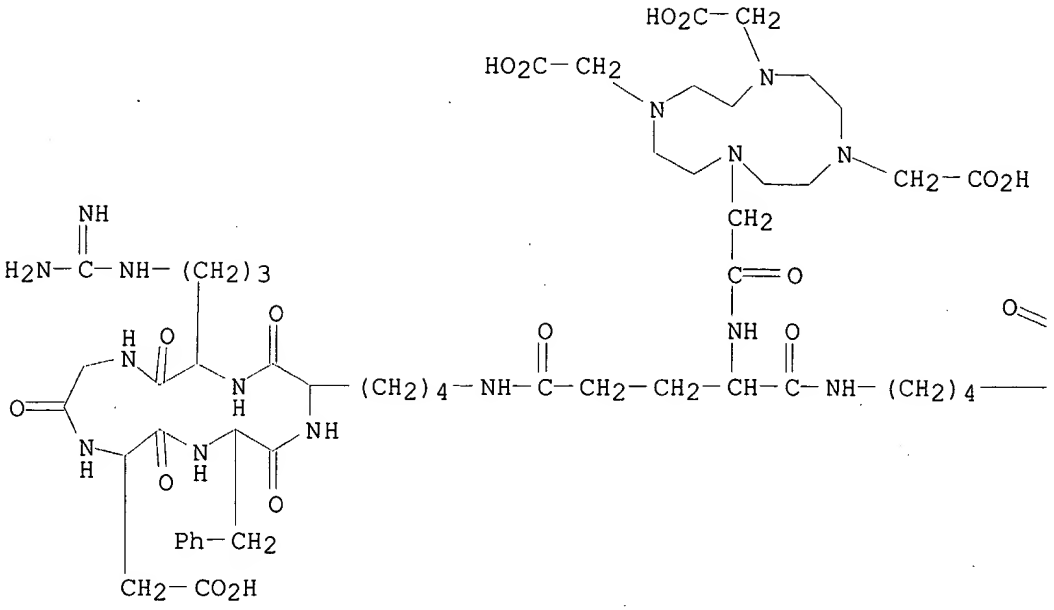
CMF C75 H113 N23 O23

PAGE 1-A



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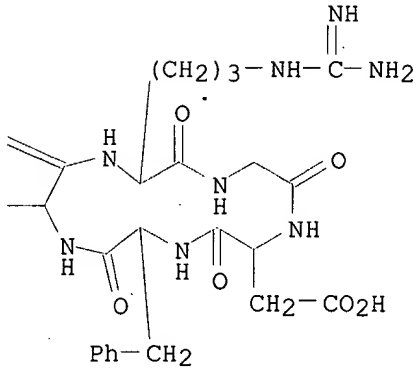

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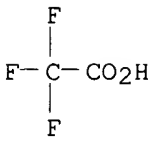
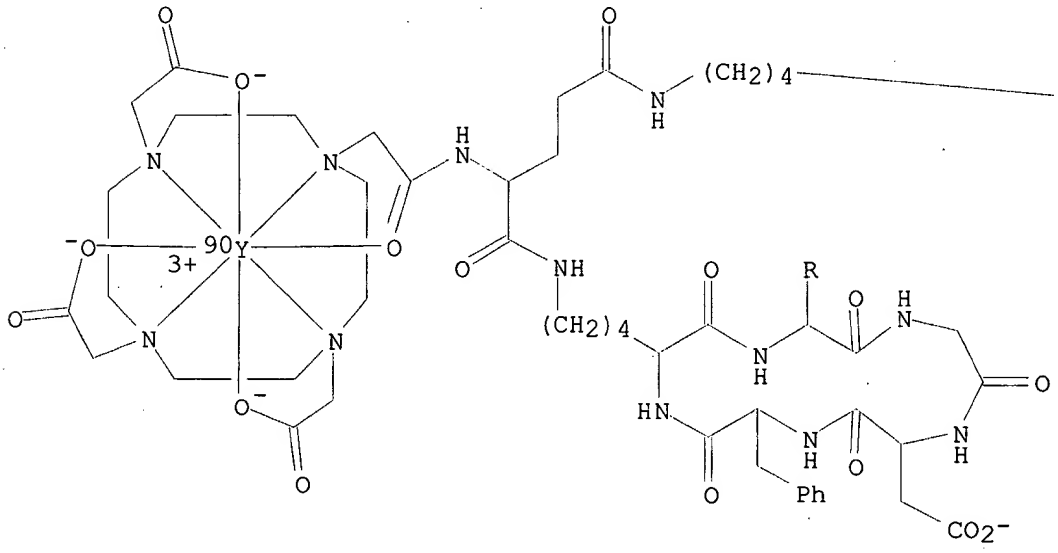


IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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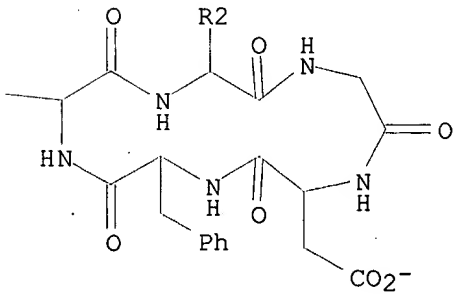

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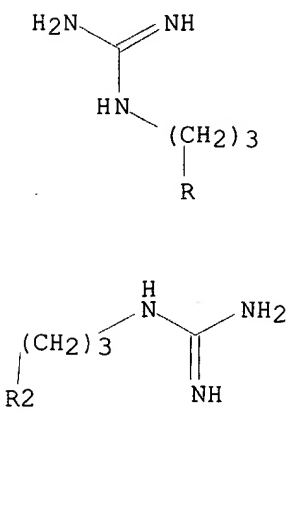

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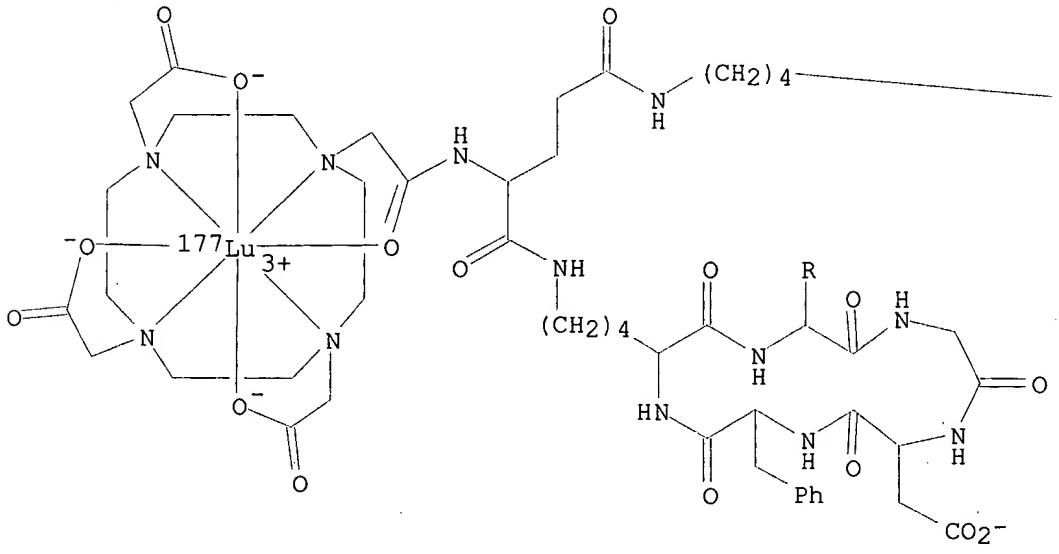
PAGE 1-A



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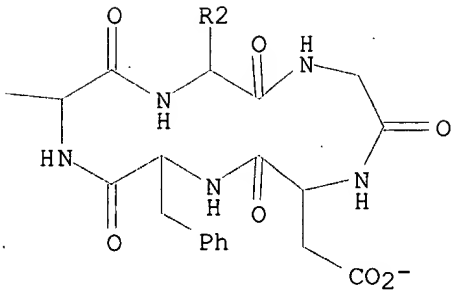

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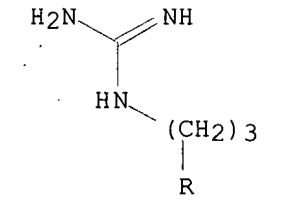
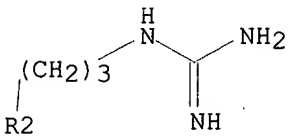
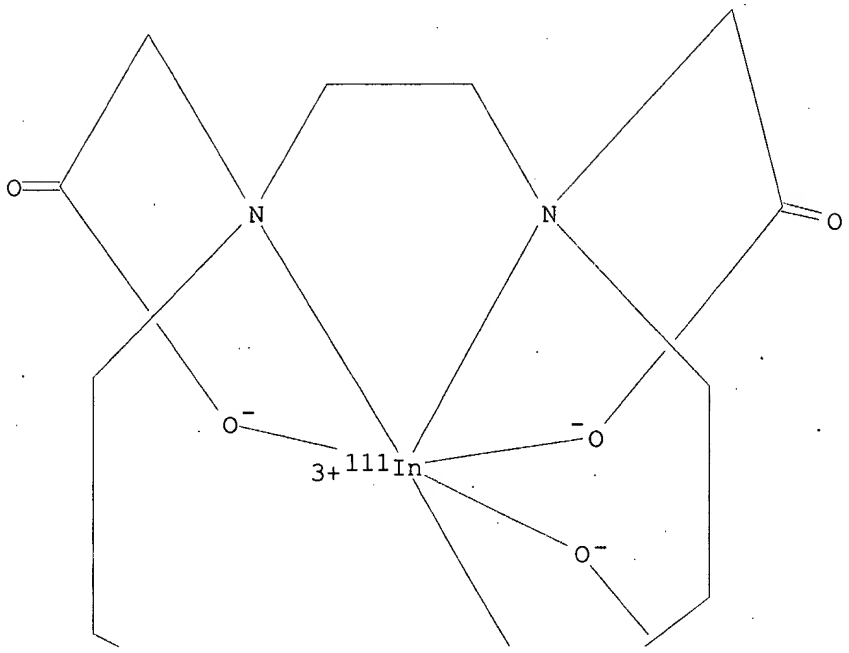




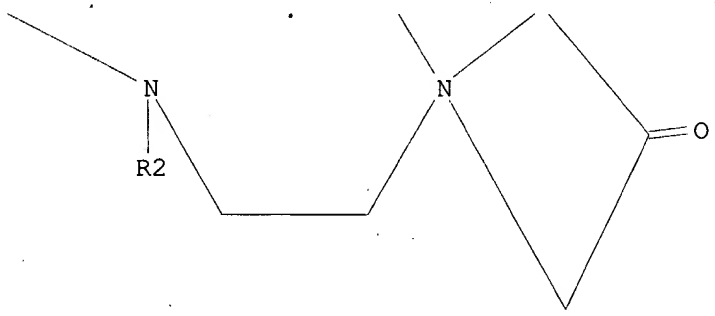
●2 H^+

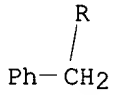
RN 250614-40-5 USPATFULL
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A

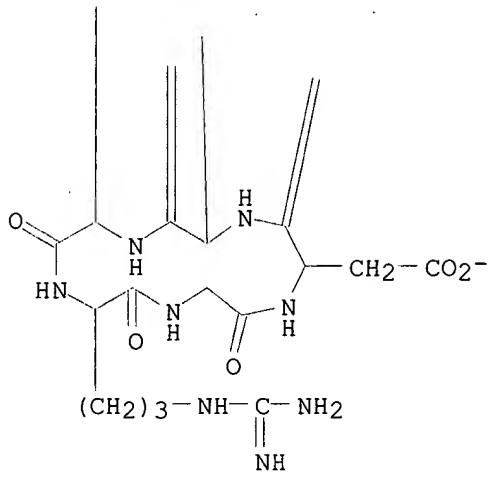


PAGE 2-A





* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



PAGE 4-A

●2 H^+

L52 ANSWER 5 OF 14 USPATFULL
AN 2002:227617 USPATFULL
TI Stable radiopharmaceutical compositions and methods for preparation thereof
IN **Liu, Shuang**, Chelmsford, MA, UNITED STATES
Barrett, John A., Groton, MA, UNITED STATES
Carpenter, Alan P., JR., Carlisle, MA, UNITED STATES
PI US 2002122768 A1 20020905
AI US 2001-899629 A1 20010705 (9)
PRAI US 2000-216396P 20000706 (60)
DT Utility
FS APPLICATION
LREP BRISTOL-MYERS SQUIBB PHARMA COMPANY, PATENT DEPARTMENT, P.O. BOX 4000, PRINCETON, NJ, 08543-4000
CLMN Number of Claims: 92
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 4115
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides stable radiopharmaceutical compositions including a therapeutic radionuclide and an effective stabilizing amount of an aromatic stabilizer (e.g., a polyhydroxylated aromatic compound, an aromatic amine, or a hydroxylated aromatic amine), alone or in combination with other antioxidants or stabilizers, to inhibit radiolytic degradation of radiopharmaceuticals. The present invention also provides improved radiopharmaceutical formulations by the use of an aromatic stabilizing agent (e.g., a polyhydroxylated aromatic compound, an aromatic amines, or a hydroxylated aromatic amine), and/or low temperature storage. The present invention also provides processes for making stable radiopharmaceutical compositions. The present invention also provides the use of the pharmaceutical compositions in medical therapy and/or medical diagnosis.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)

RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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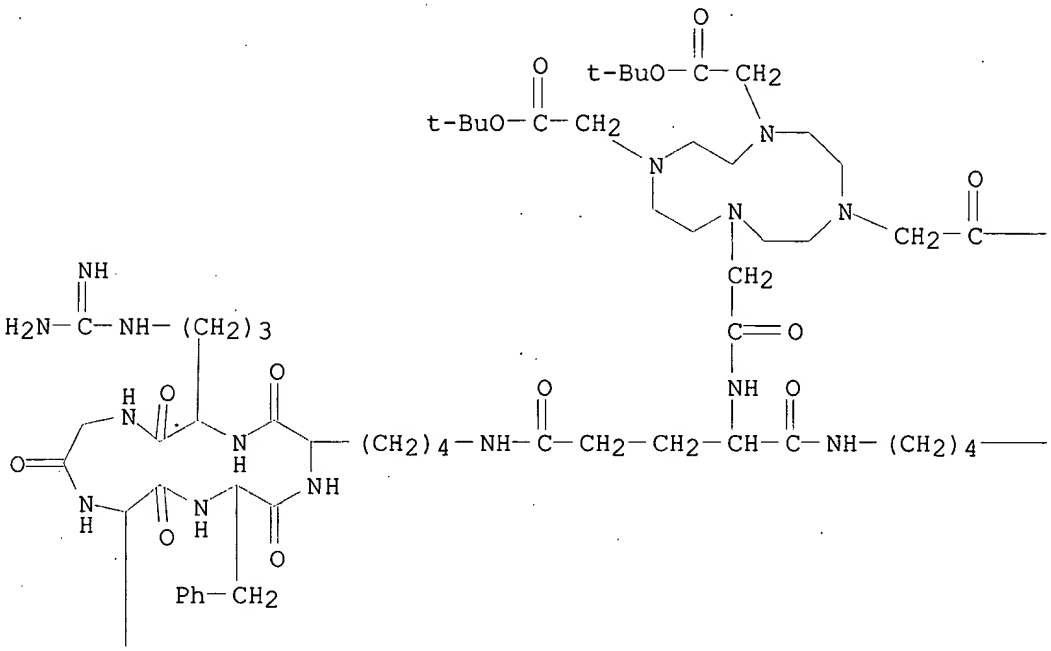
CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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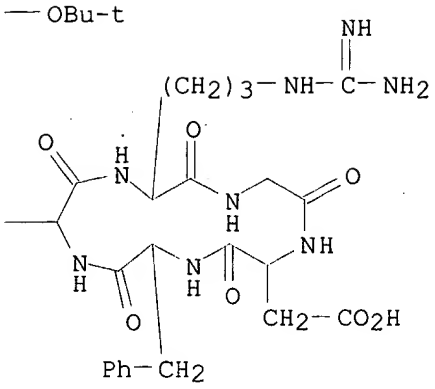

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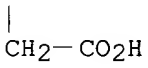
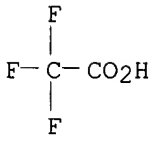


CM 2

CRN 76-05-1
CMF C2 H F3 O2

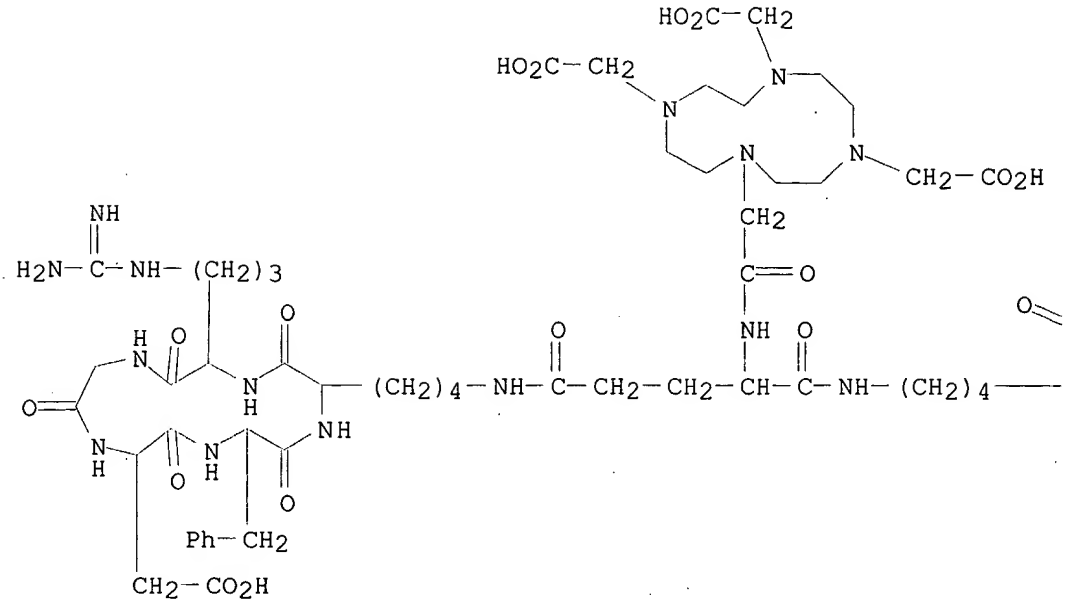


IT **250612-07-8P**
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)
RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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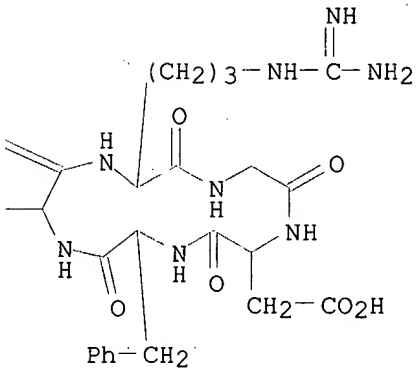
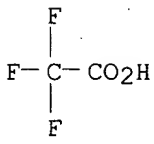


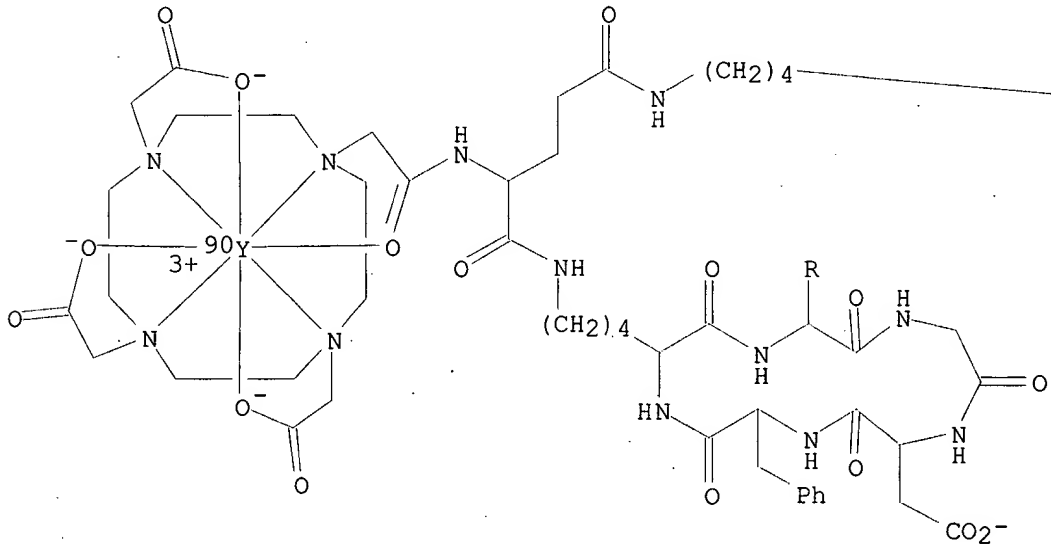
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P**
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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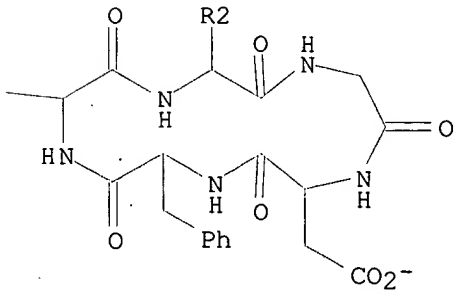

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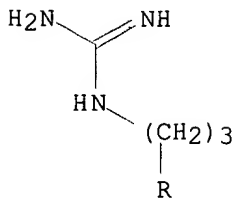
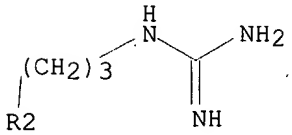


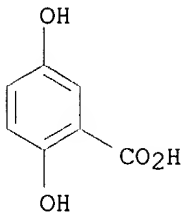


●2 H^+

IT **10098-91-6D**, 90Y, complexes, biological studies
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)
RN 10098-91-6 USPATFULL
CN Yttrium, isotope of mass 90 (8CI, 9CI) (CA INDEX NAME)

^{90}Y

IT **490-79-9**, Gentisic acid
(stabilizing agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)
RN 490-79-9 USPATFULL
CN Benzoic acid, 2,5-dihydroxy- (9CI) (CA INDEX NAME)



L52 ANSWER 6 OF 14 USPATFULL
AN 2002:198232 USPATFULL
TI Simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent
IN **Carpenter,, Alan P., JR.**, Carlisle, MA, UNITED STATES
PI US 2002106325 A1 20020808
AI US 2001-995388 A1 20011127 (9)
PRAI PH 2000-7201 20001127
DT Utility
FS APPLICATION
LREP BRISTOL-MYERS SQUIBB PHARMA COMPANY, PATENT DEPARTMENT, P.O. BOX 4000, PRINCETON, NJ, 08543-4000
CLMN Number of Claims: 66

ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 6224
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes a method of concurrent imaging in a mammal comprising:

a) administering to said mammal a vitronectin receptor targeted imaging agent and a perfusion imaging agent; and

b) concurrently detecting the vitronectin target imaging agent bound at the vitronectin receptor and the perfusion imaging agent; and

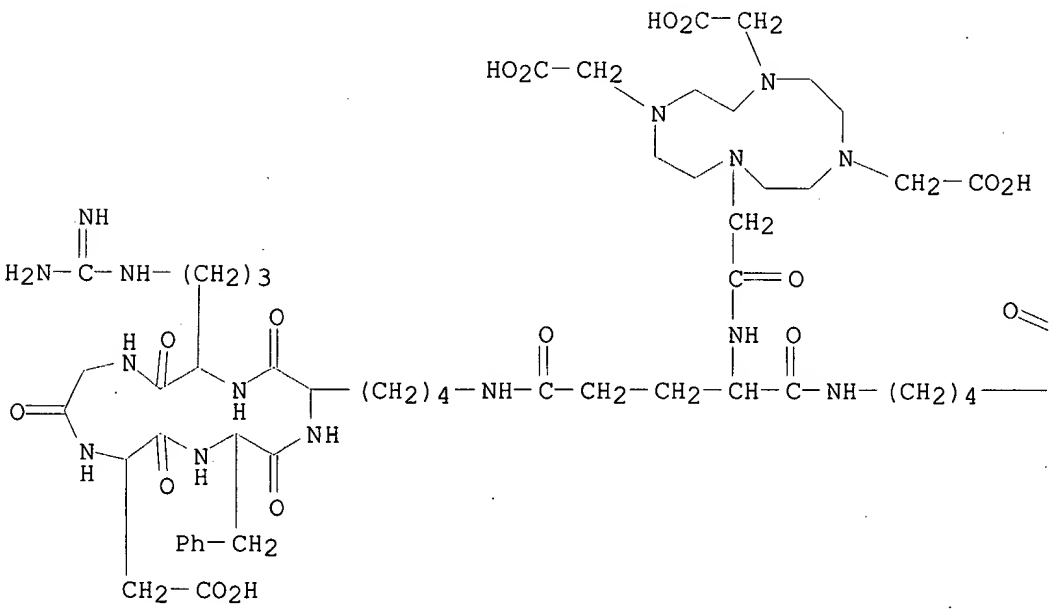
c) forming an image from the detection of said vitronectin receptor targeted imaging agent and said perfusion imaging agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-07-8P**
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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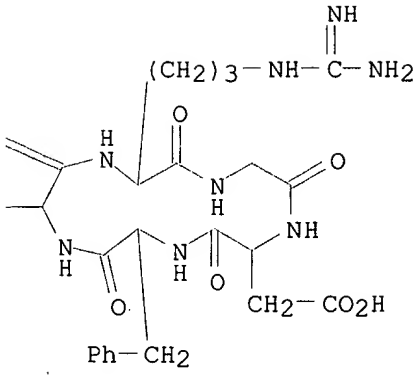
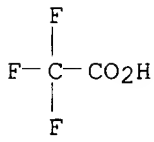


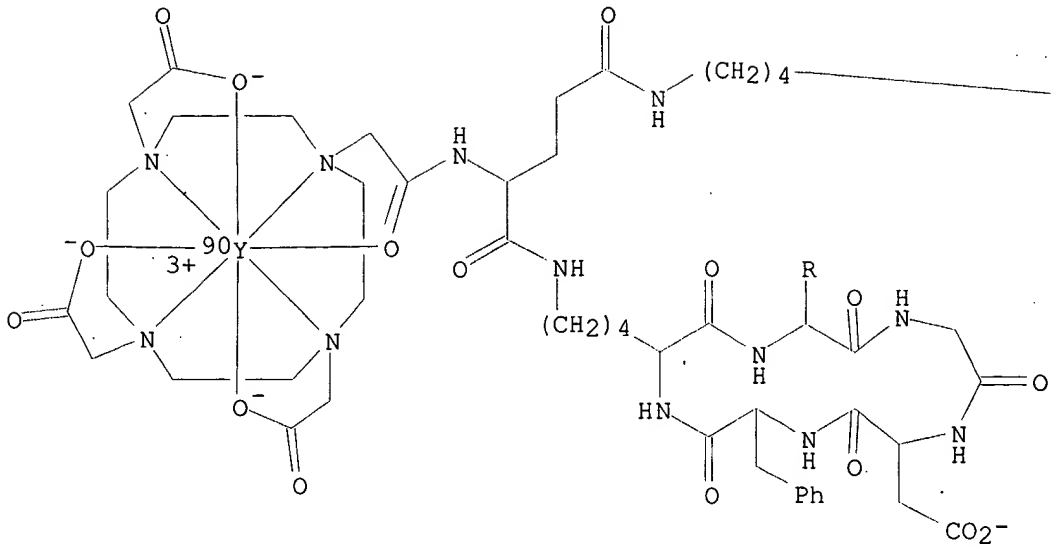
CM 2

CRN 76-05-1
CMF C2 H F3 O2

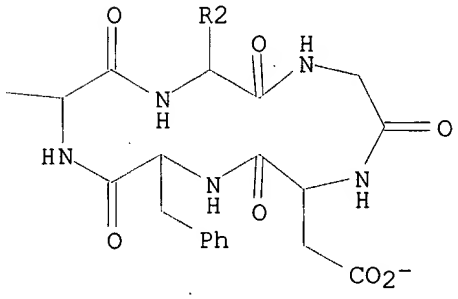


IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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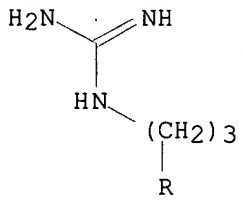

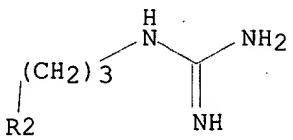

2 H^+

RN 250614-39-2 USPATFULL
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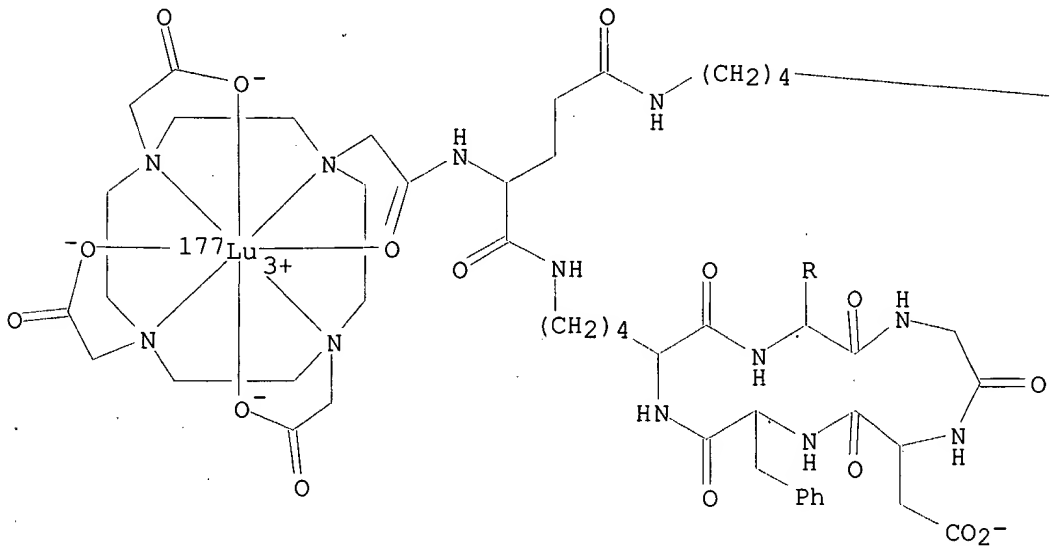
PAGE 1-A



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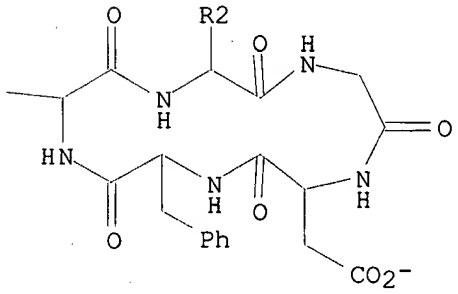

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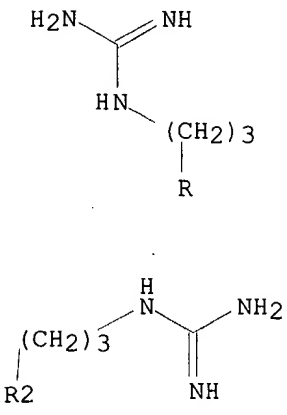
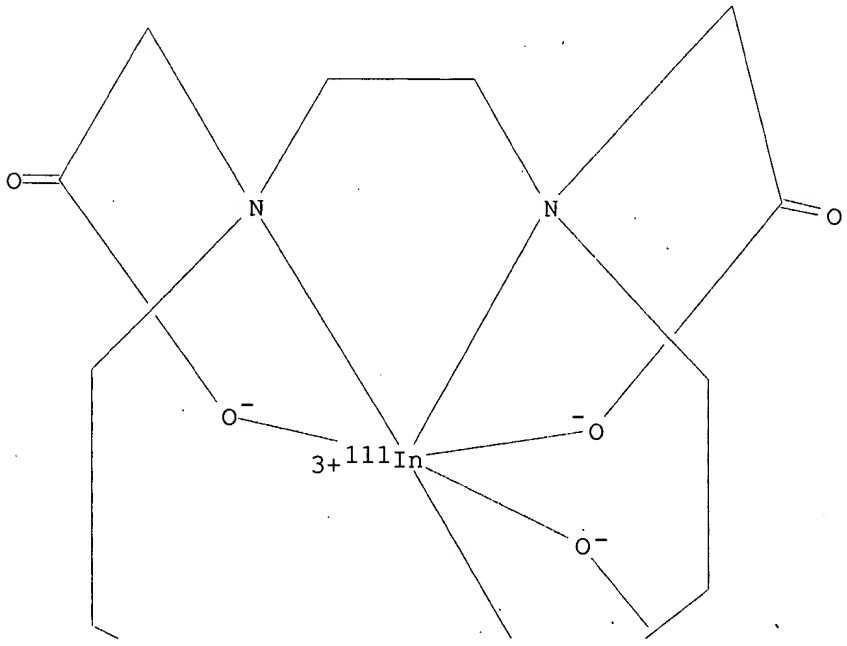
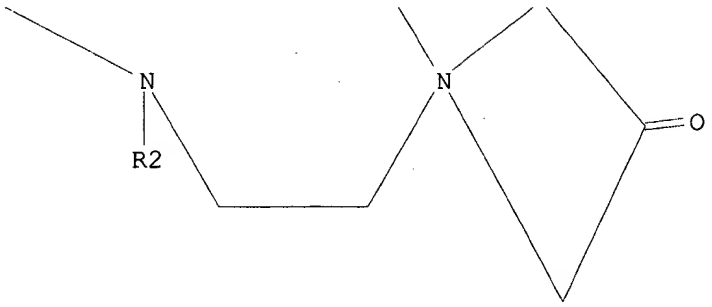


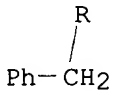
RN 250614-40-5 USPATFULL
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



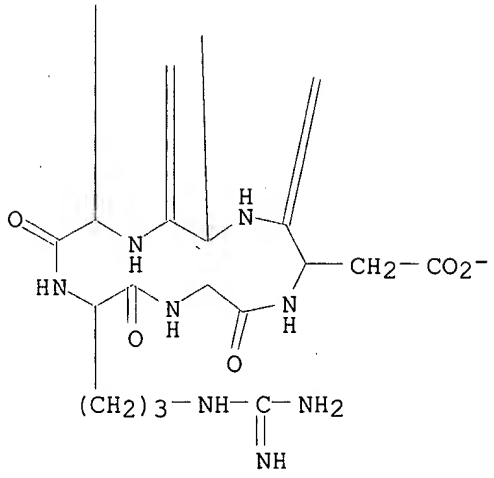
PAGE 2-A





* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 4-A



2 H^+

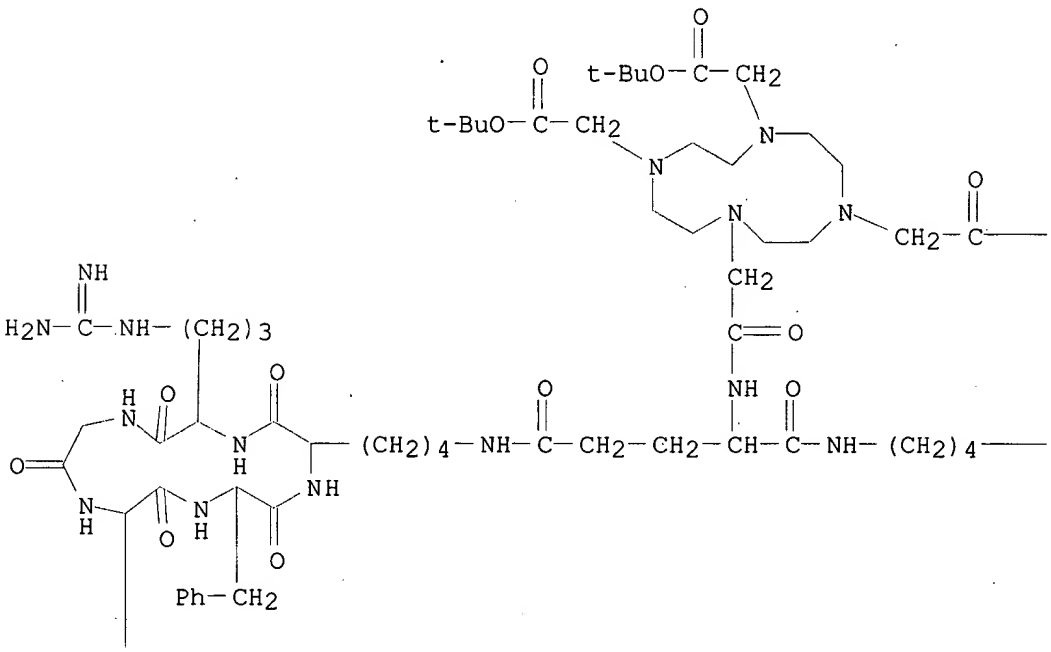
IT **250612-82-9P**
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl),

5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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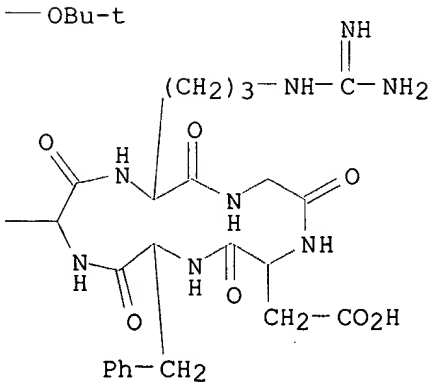

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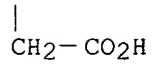
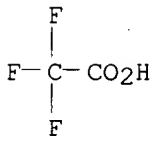


CM 2

CRN 76-05-1
CMF C2 H F3 O2



L52 ANSWER 7 OF 14 USPATFULL
AN 2002:135936 USPATFULL
TI Arrayable thermal assays
IN Ludington, David Norman, Newton, PA, United States
Fare, Thomas Louis, Redmond, WA, United States
Lo Iacono, Dominic Joseph, Yardville, NJ, United States
Davis, Timothy James, Columbus, NJ, United States
Semus, Helen Jiang, Bensalem, PA, United States
Stabile, Paul John, Langhorne, PA, United States
Guarnieri, Frank, Brooklyn, NY, United States
Granzow, Russell Todd, Titusville, NJ, United States
Zanzucchi, Peter J., Lawrenceville, NJ, United States
Chiang, William, Monmouth Jct., NJ, United States
PA Sarnoff Corporation, Princeton, NJ, United States (U.S. corporation)
PI US 6402369 B1 20020611
AI US 1999-432736 19991102 (9)
PRAI US 1998-112629P 19981216 (60)
US 1998-106811P 19981103 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Gutierrez, Diego; Assistant Examiner: Pruchnic, Jr., Stanley J.
LREP Burke, William J.
CLMN Number of Claims: 16
ECL Exemplary Claim: 1
DRWN 11 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 1360
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are, among other things, devices for and methods for performing thermal signature assays on a two or more samples in an array, using active/control base thermopiles, the method comprising: [a] performing a heat transfer to the two or more samples in each of a two or more containers, using at least one base thermopile in thermal communication with the two or more containers; and [b] determining a total heat transferred to the samples by the base thermopile in step [a]; and [c] sensing in real time a temperature difference between a first sample and a second sample of the two or more samples resulting from performing step [a].

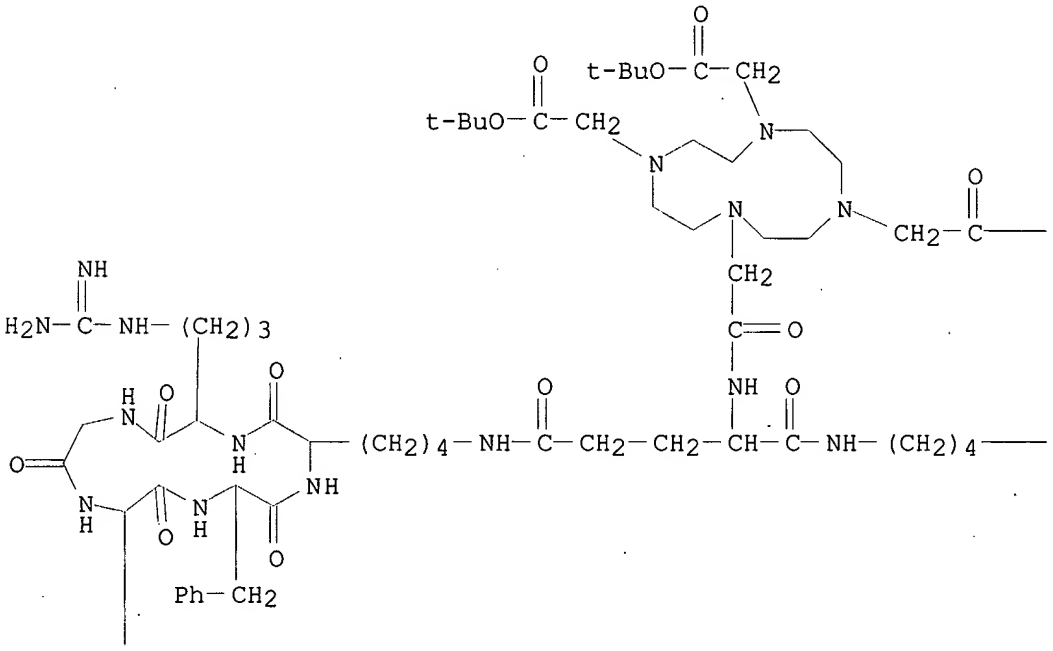
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

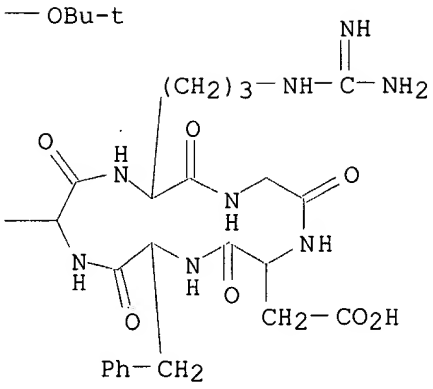
CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



PAGE 1-B



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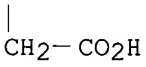
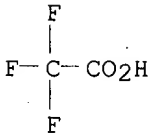


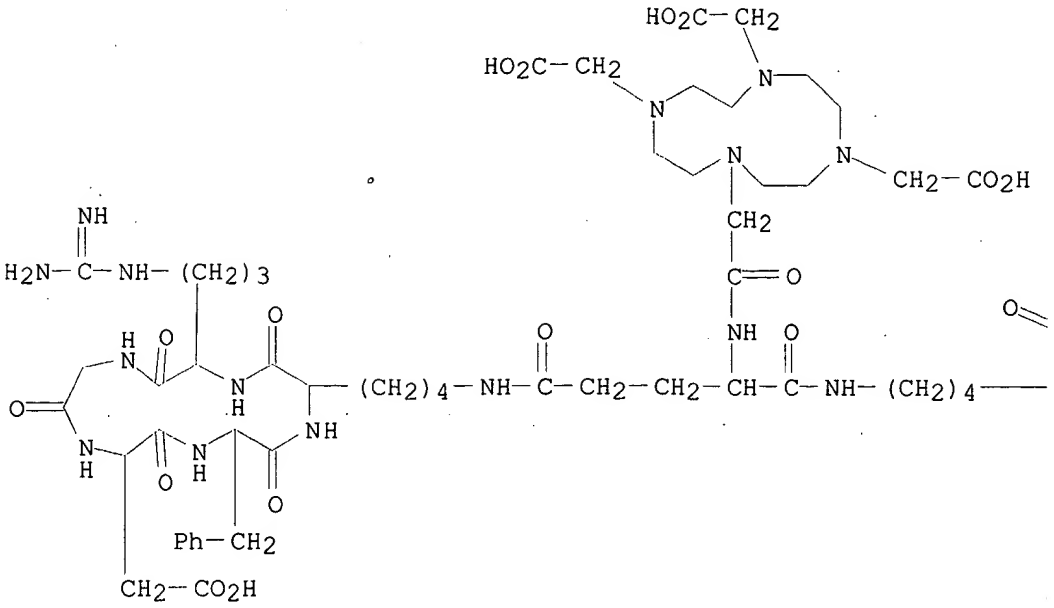
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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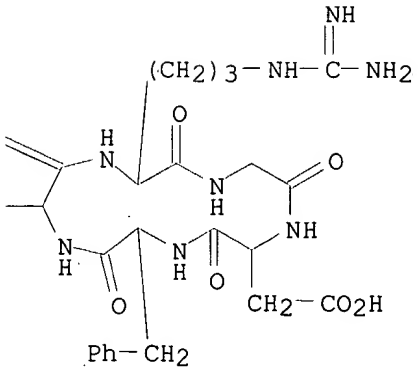
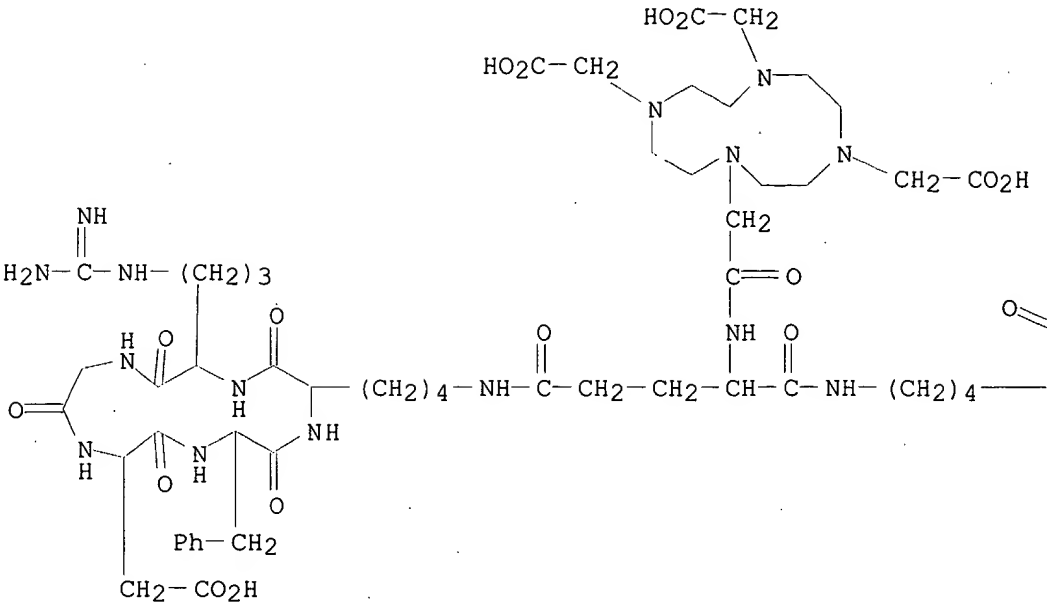


RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

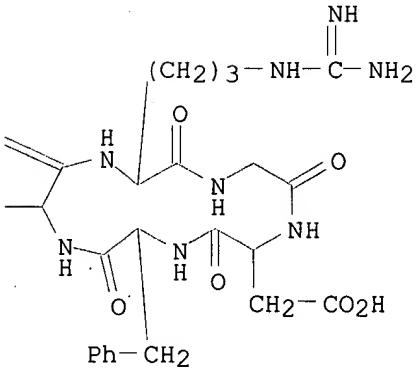
CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A

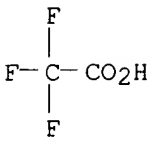


PAGE 1-B



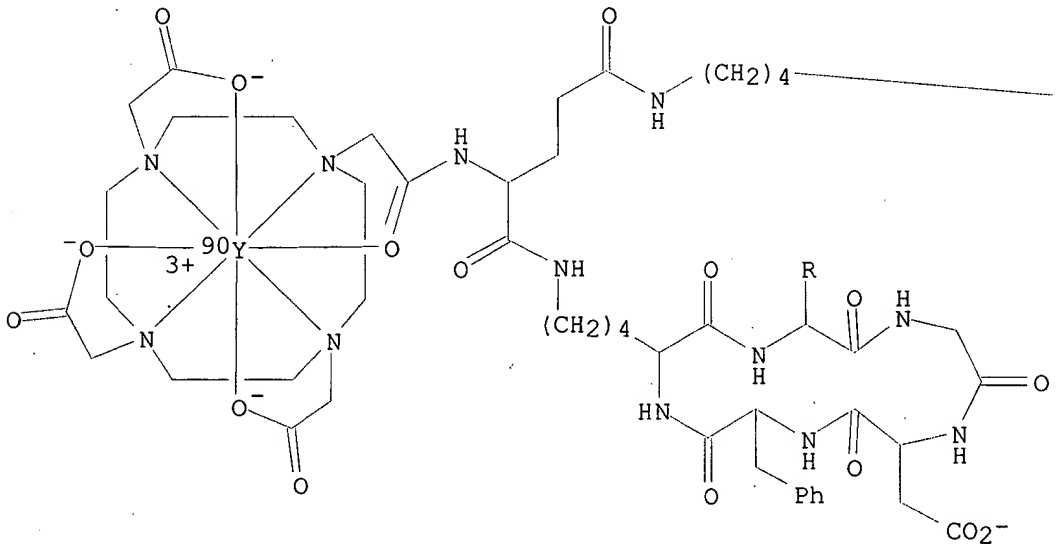
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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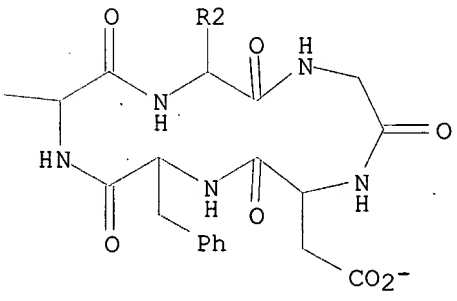
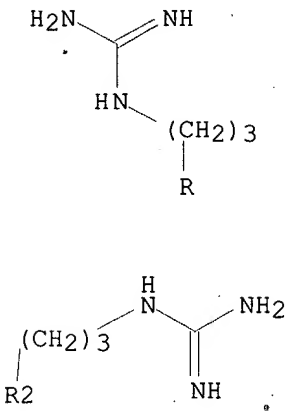


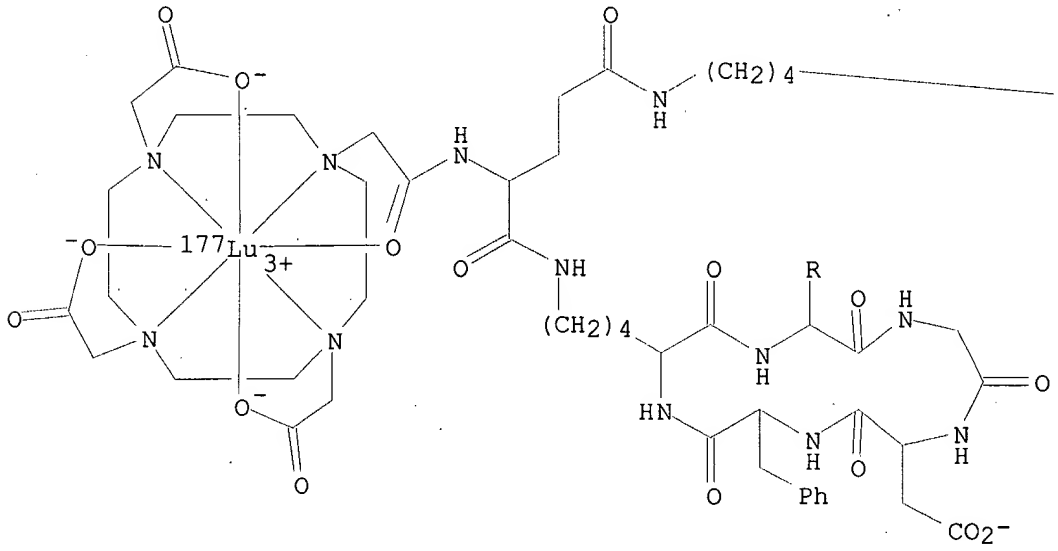
PAGE 2-A



●2 H^+

RN 250614-39-2 USPATFULL
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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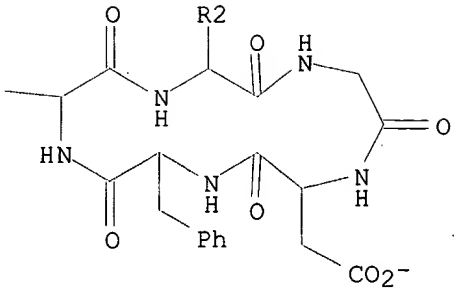

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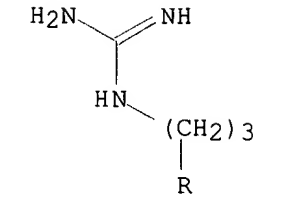
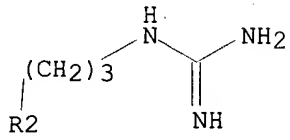
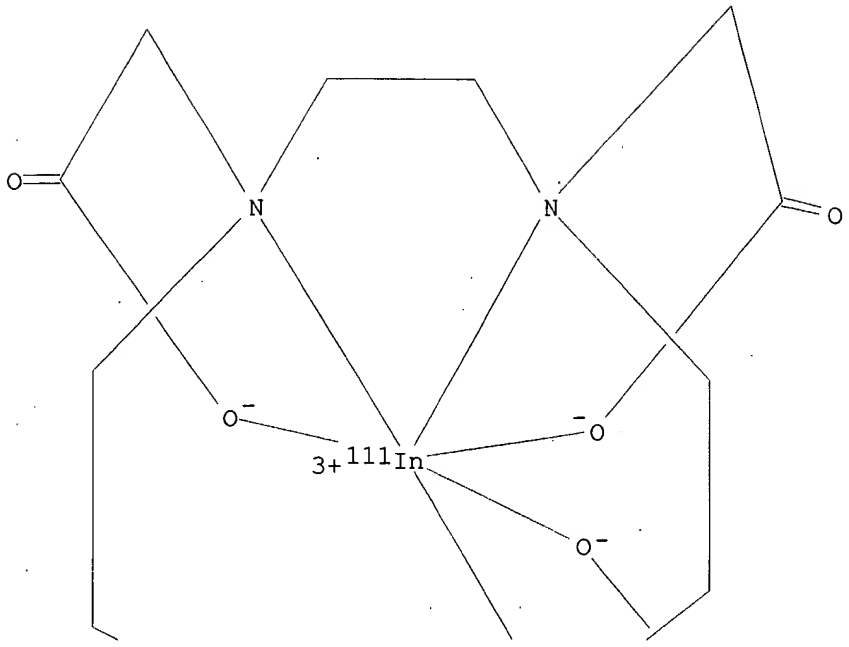




●2 H^+

RN 250614-40-5 USPATFULL
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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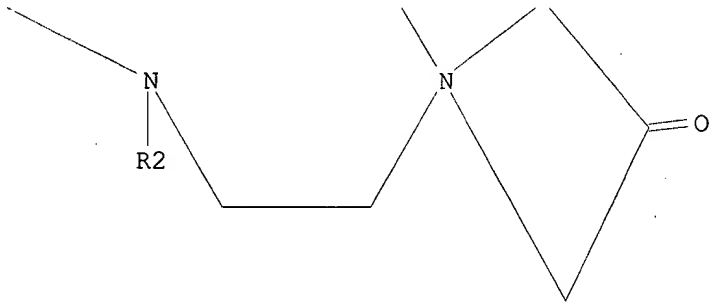
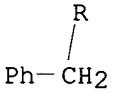
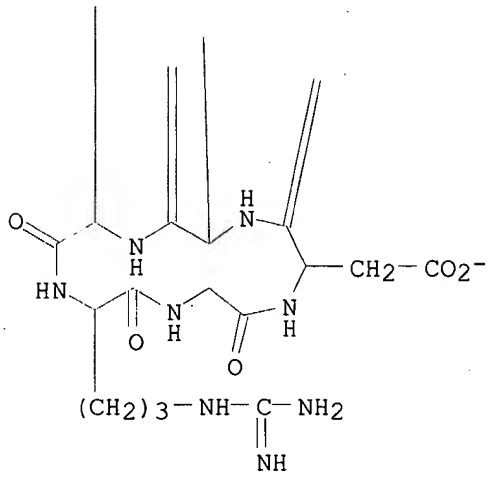




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



PAGE 4-A

●2 H^+

L52 ANSWER 8 OF 14 USPATFULL
AN 2002:119921 USPATFULL
TI Vitronectin receptor antagonist pharmaceuticals
IN Harris, Thomas D., Salem, NH, UNITED STATES
Rajopadhye, Milind, Westford, MA, UNITED STATES
PI US 2002061909 A1 20020523
AI US 2001-948390 A1 20010907 (9)
RLI Continuation of Ser. No. US 1999-465300, filed on 17 Dec 1999, PENDING
PRAI US 1998-112732P 19981218 (60)
DT Utility
FS APPLICATION
LREP DuPont Pharmaceuticals Company, c/o E. I. duPont de Nemours and Company, Legal - Patents, 1007 Market Street, Wilmington, DE, 19898
CLMN Number of Claims: 57
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 7403
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

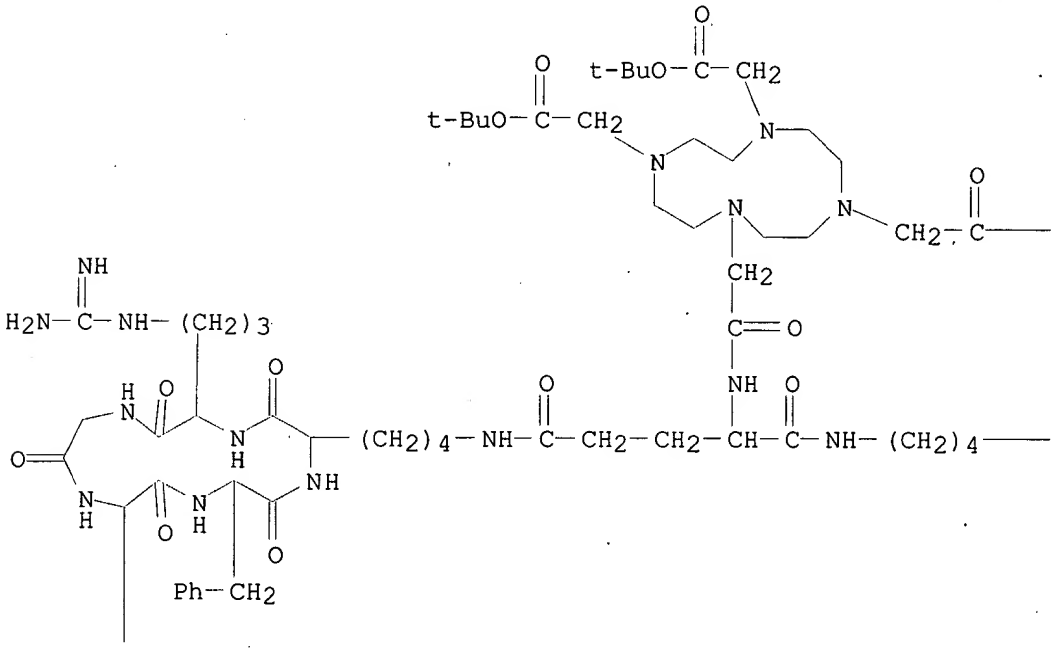
useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The present invention further provides novel compounds useful for imaging atherosclerosis, restenosis, cardiac ischemia, and myocardial reperfusion injury. The present invention still further provides novel compounds useful for the treatment of rheumatoid arthritis. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

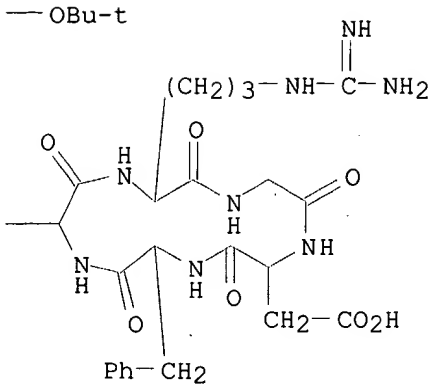
CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

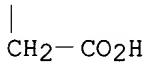
PAGE 1-A



PAGE 1-B



PAGE 2-A



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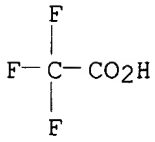
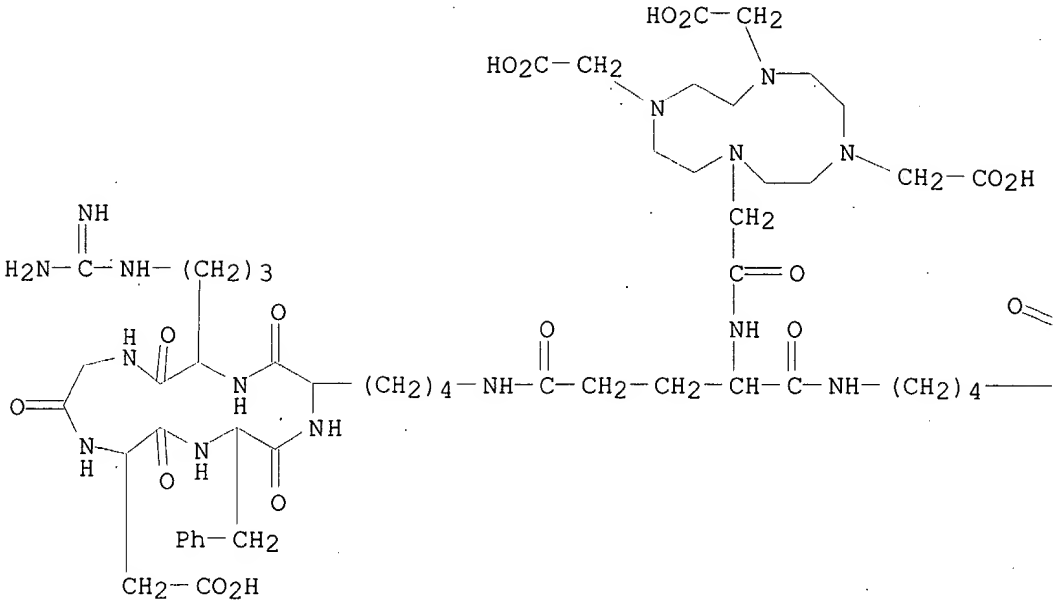
CRN 76-05-1
CMF C2 H F3 O2



IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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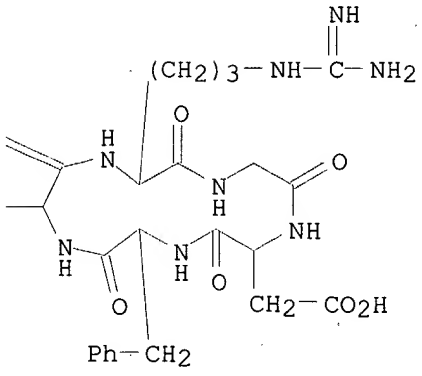
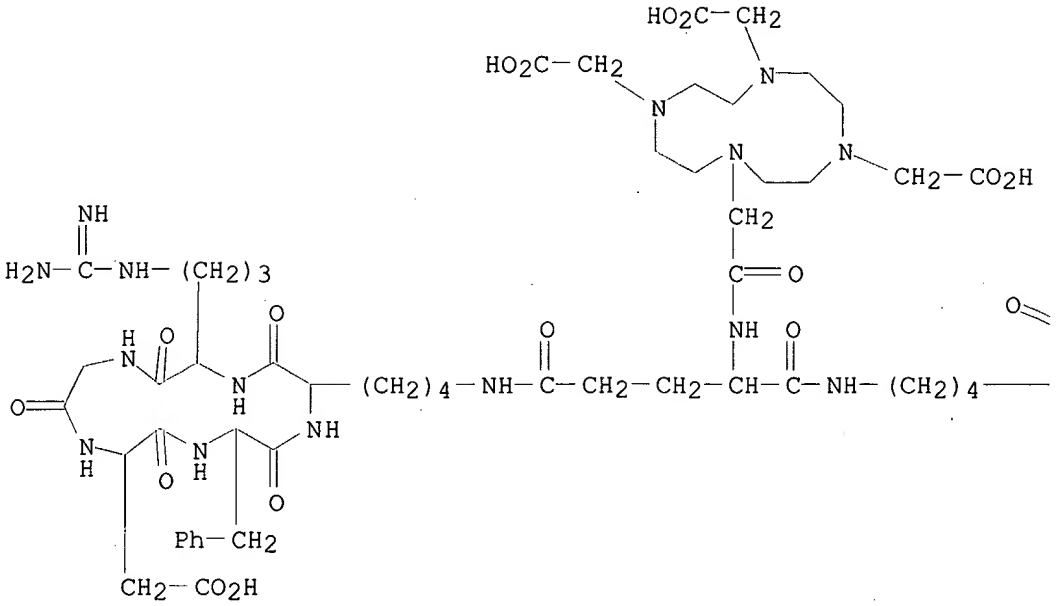


RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

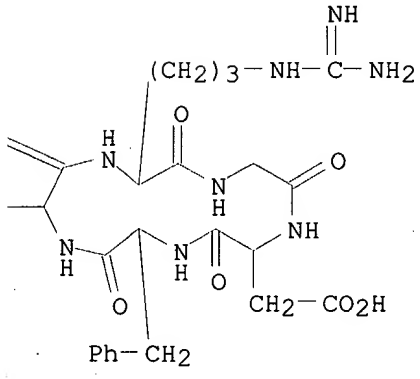
CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A

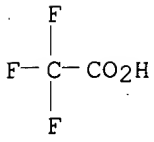


PAGE 1-B



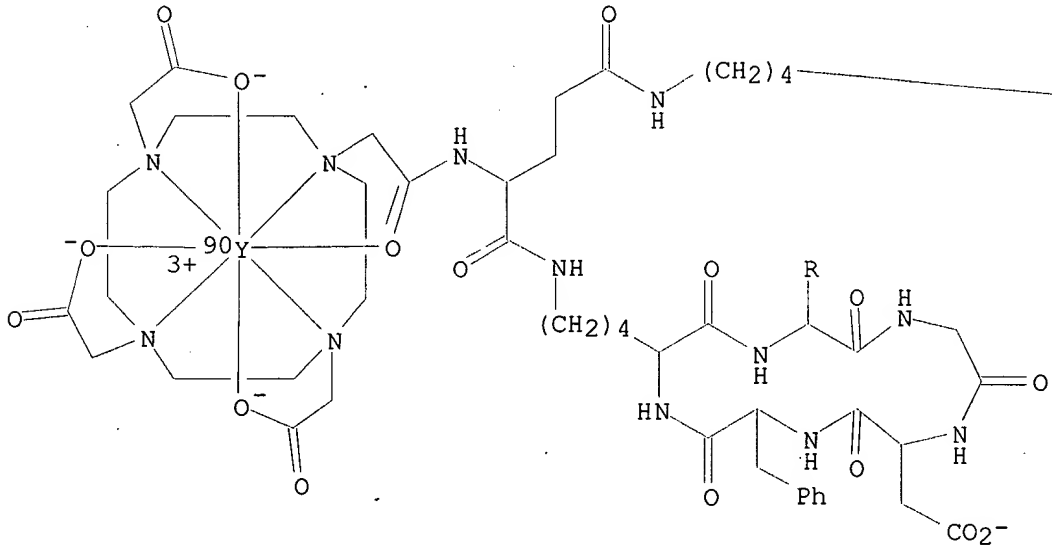
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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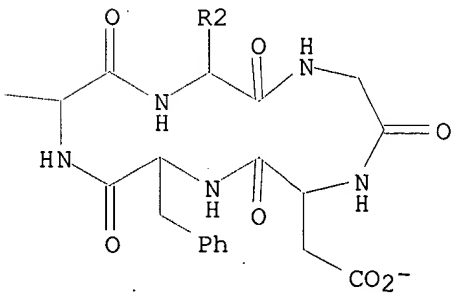

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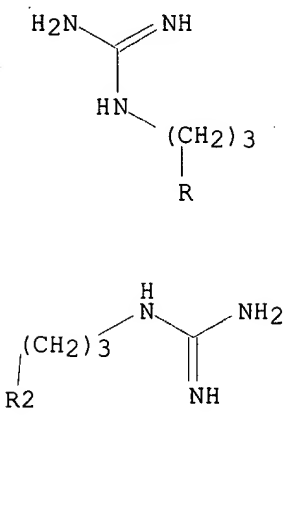
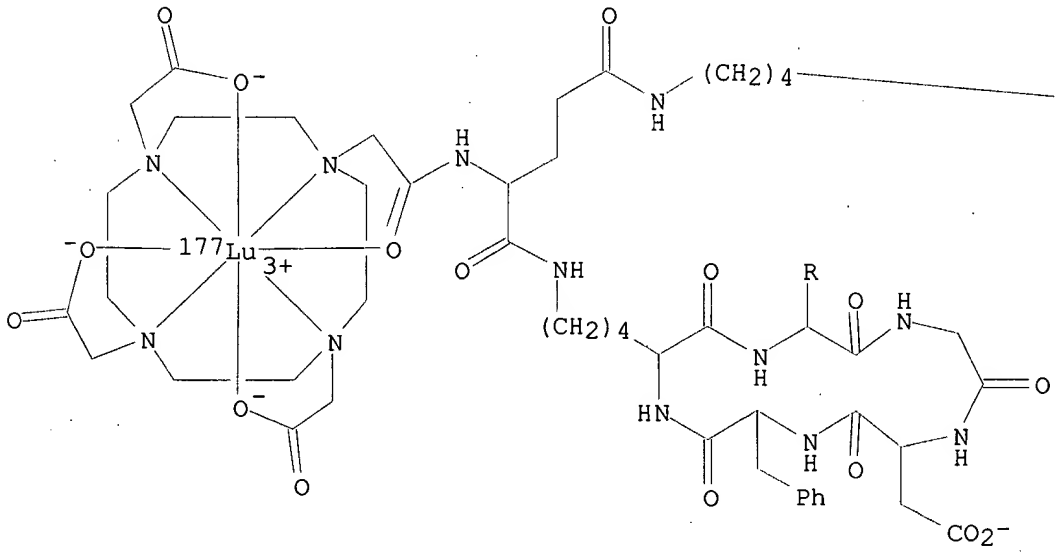


RN 250614-39-2 USPATFULL
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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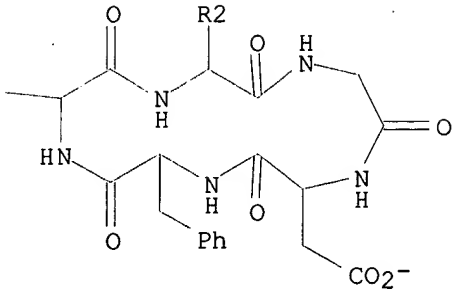

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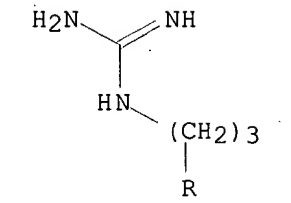
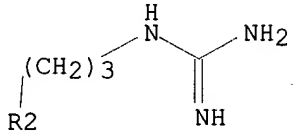
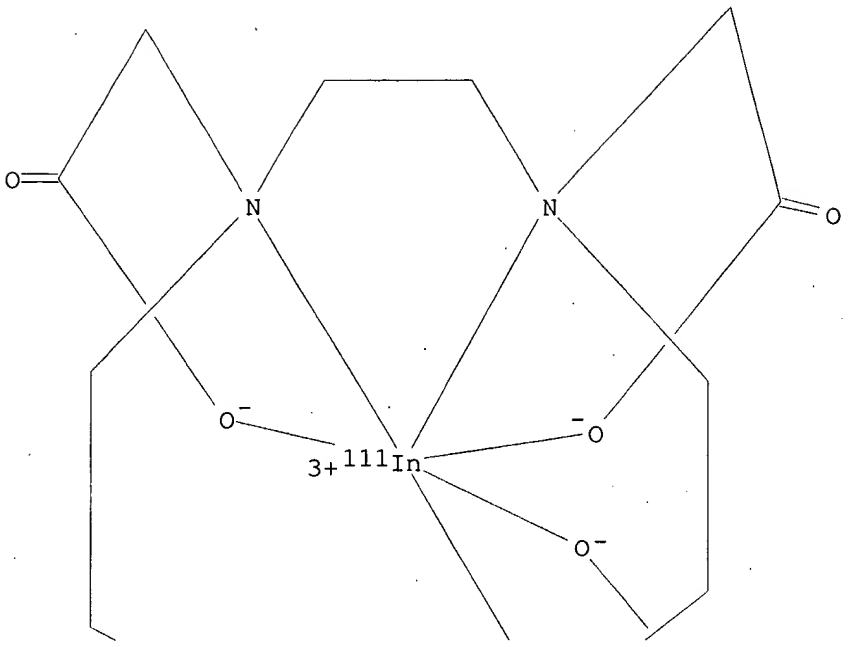




●2 H^+

RN 250614-40-5 USPATFULL
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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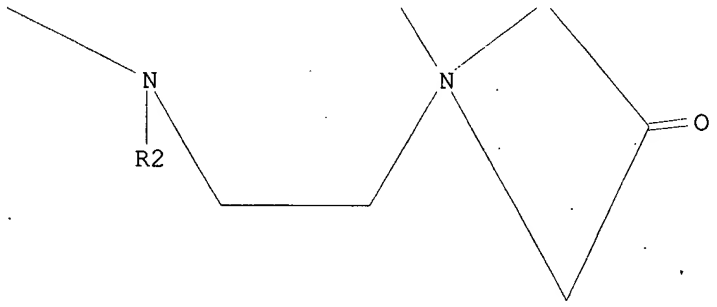

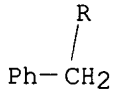

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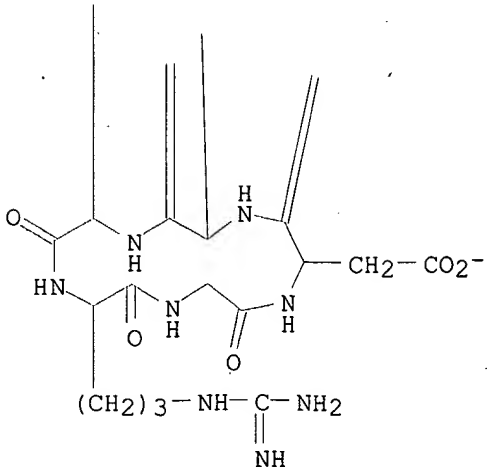

PAGE 4-A

●2 H^+

L52 ANSWER 9 OF 14 USPATFULL
AN 2002:26835 USPATFULL
TI QUINOLONE VITRONECTIN RECEPTOR ANTAGONIST PHARMACEUTICALS
IN HARRIS, THOMAS DAVID, SALEM, NH, UNITED STATES
PI US 2002015680 A1 20020207
US 6524553 B2 20030225
AI US 1999-281209 A1 19990330 (9)
PRAI US 1998-80150P 19980331 (60)
US 1998-112715P 19981218 (60)
US 1998-112829P 19981218 (60)
US 1998-112732P 19981218 (60)
US 1998-112831P 19981218 (60)
DT Utility
FS APPLICATION
LREP Dupont Pharmaceuticals Company, Legal Department - Patents, 1007 Market Street, Wilmington, DE, 19898
CLMN Number of Claims: 48
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 6696
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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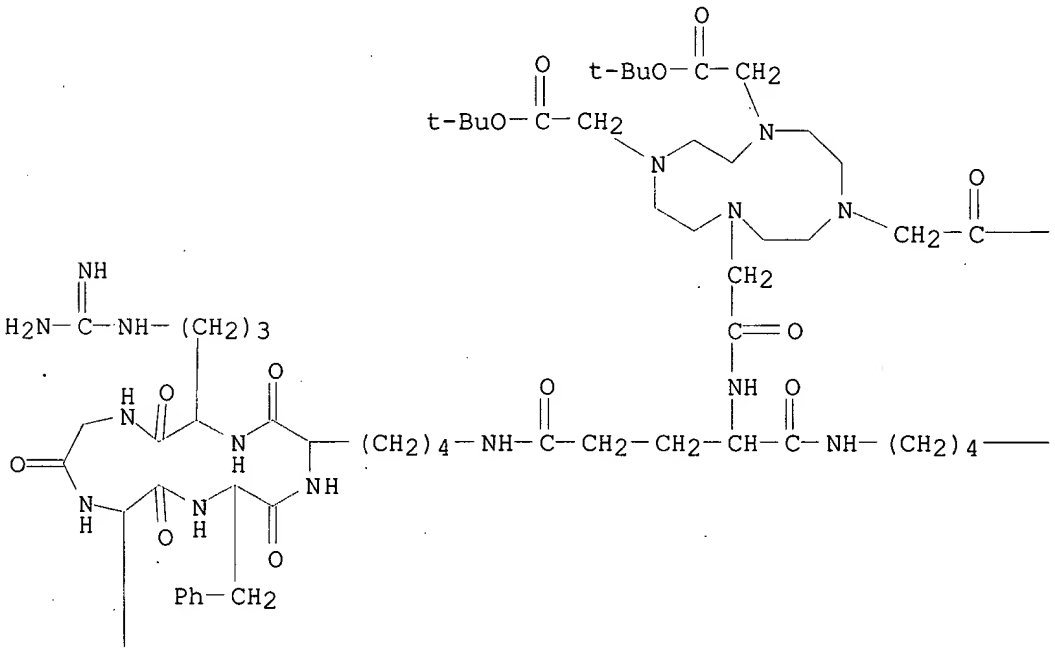
CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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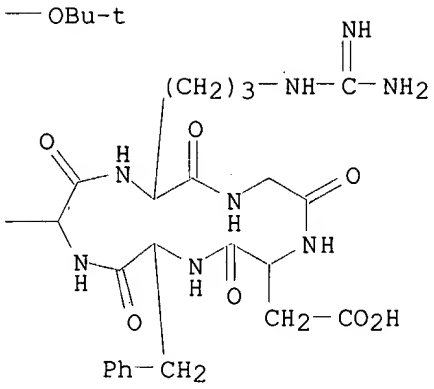

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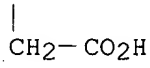

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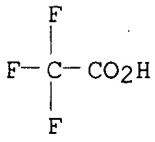

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(prepn. of peptide derivs. for the imaging of angiogenic disorders)
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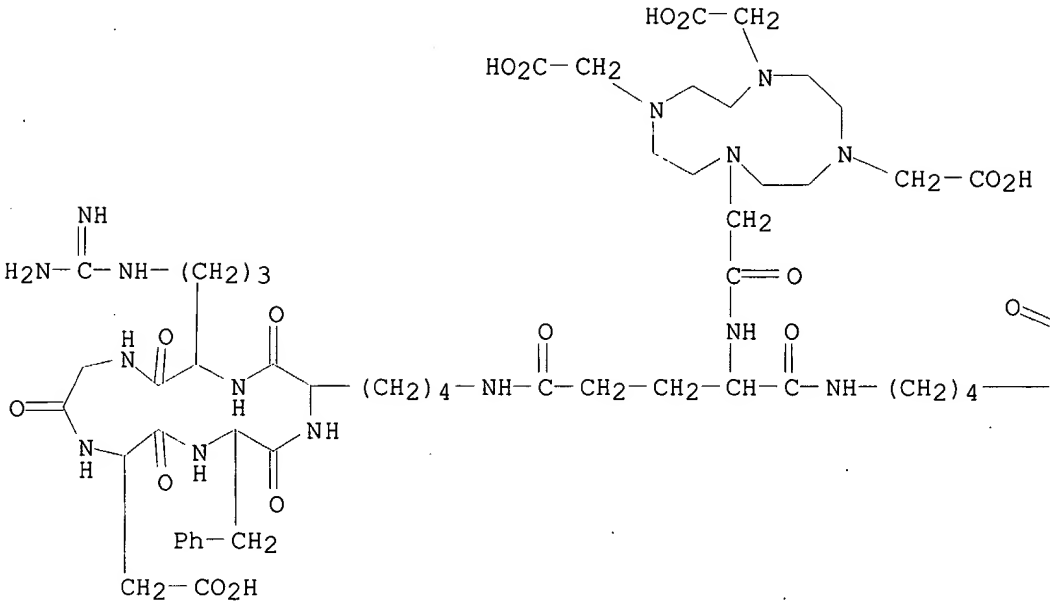
PAGE 1-A



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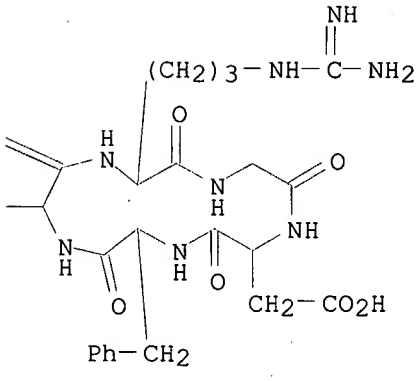

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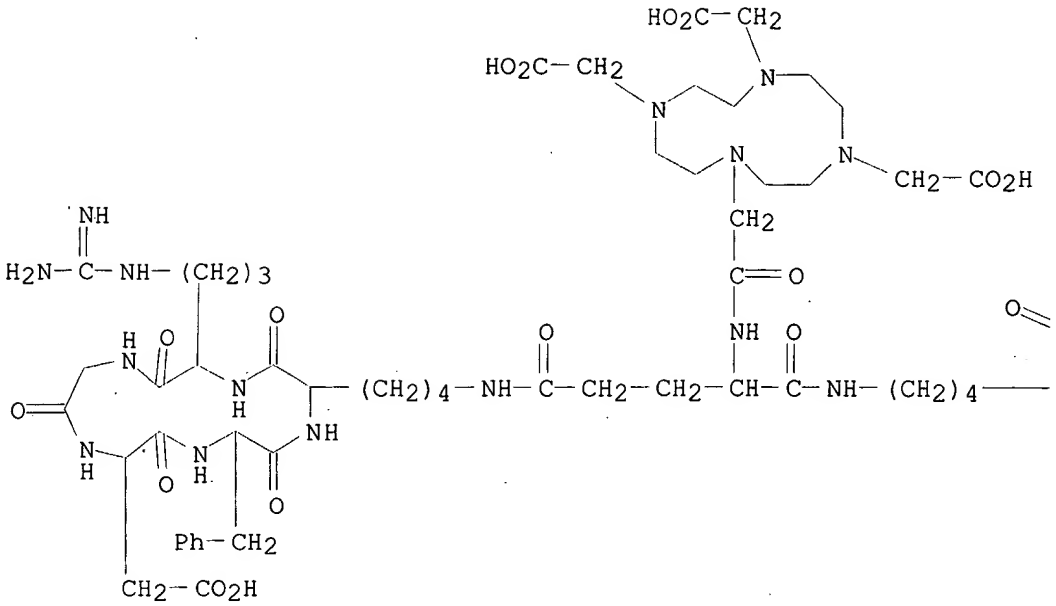

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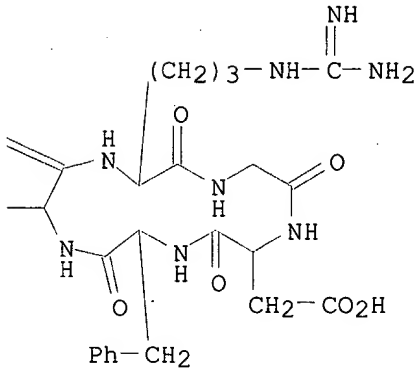

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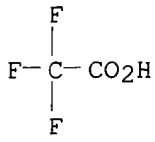

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(prepn. of peptide derivs. for the imaging of angiogenic disorders)
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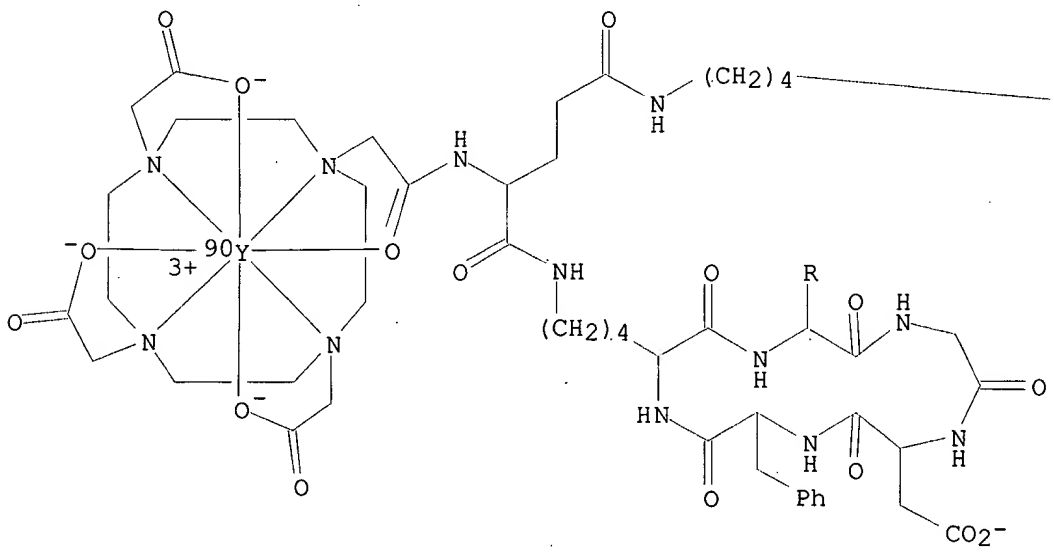
PAGE 1-A



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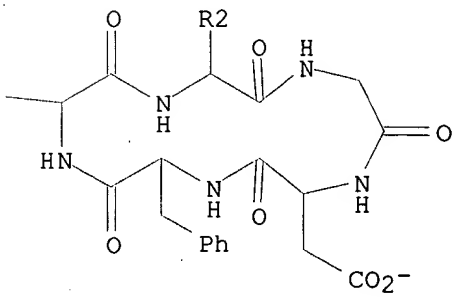

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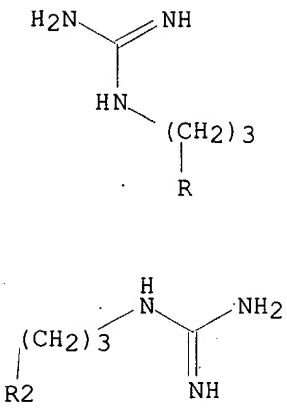

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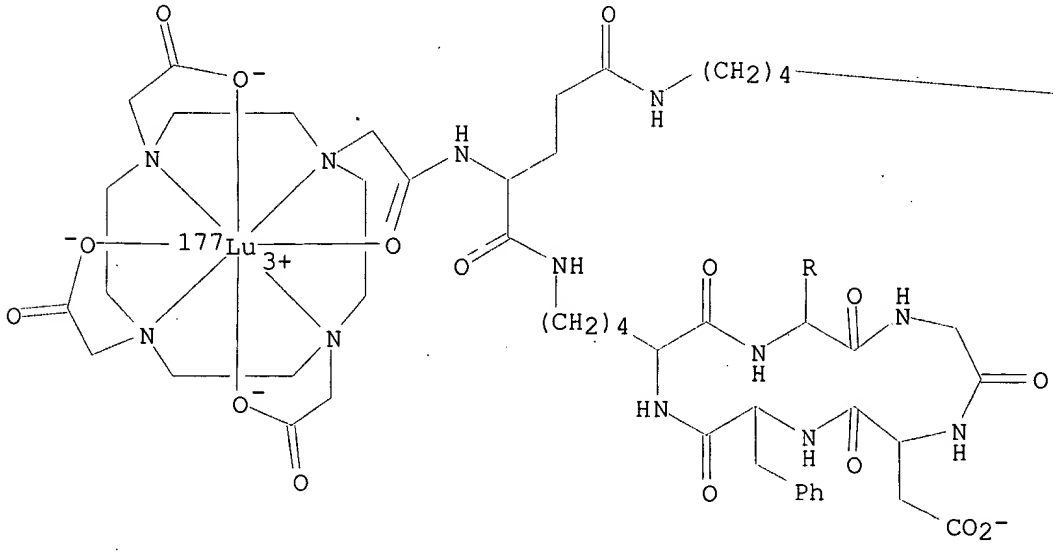
PAGE 1-A



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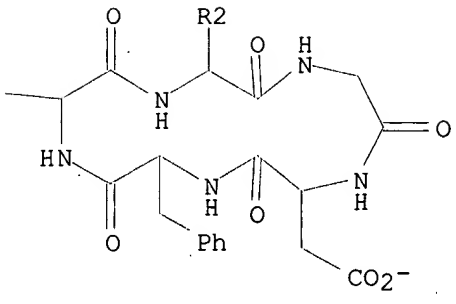

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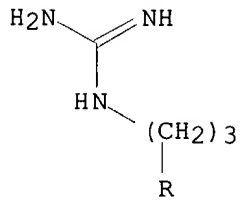

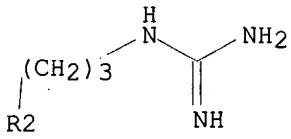

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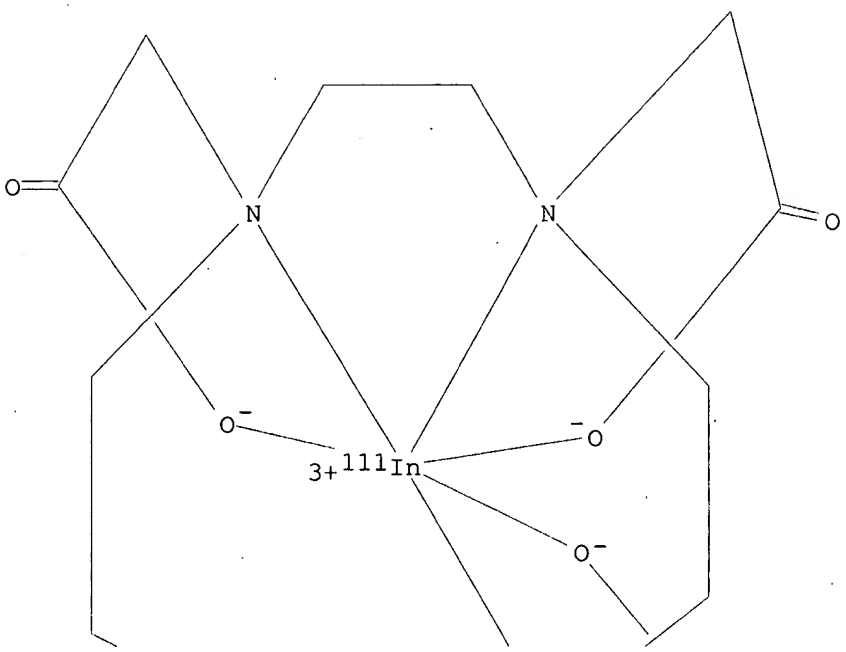
PAGE 1-A



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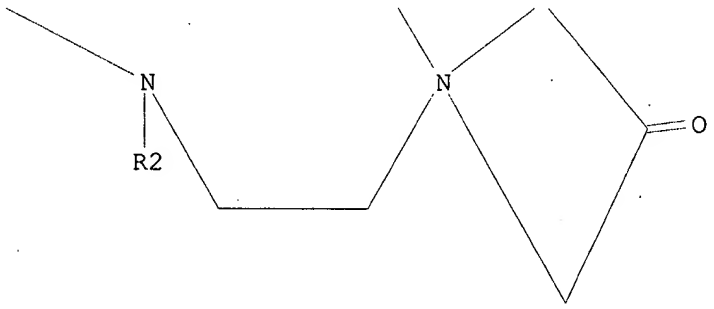

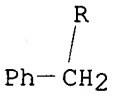

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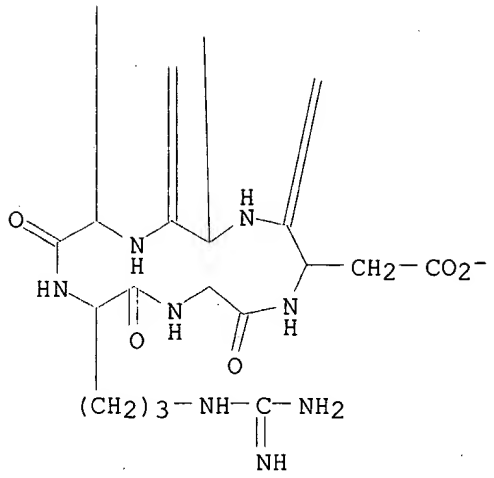

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L52 ANSWER 10 OF 14 USPATFULL
AN 2002:3593 USPATFULL
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IN RAJOPADHYE, MILIND, WESTFORD, MA, UNITED STATES
EDWARDS, D. SCOTT, BURLINGTON, MA, UNITED STATES
HARRIS, THOMAS D., SAMEL, NH, UNITED STATES
HAMINWAY, STUART J., LOWELL, MA, UNITED STATES
LIU, SHUANG, CHELMSFORD, MA, UNITED STATES
SINGH, PRAHLAD R., ARLINGTON, MA, UNITED STATES
PI US 2002001566 A1 20020103
AI US 1999-281474 A1 19990330 (9)
PRAI US 1998-80150P 19980331 (60)
US 1998-112715P 19981218 (60)
DT Utility
FS APPLICATION
LREP DAVID H. VANCE, DUPONT PHARMACEUTICALS COMPANY, C/O E. I. DU PONT DE NEMOURS AND CO., LEGAL - PATENTS-1007 MARKET STREET, WILMINGTON, DE, 19898
CLMN Number of Claims: 51
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 5872
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound

contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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CMF C87 H137 N23 O23

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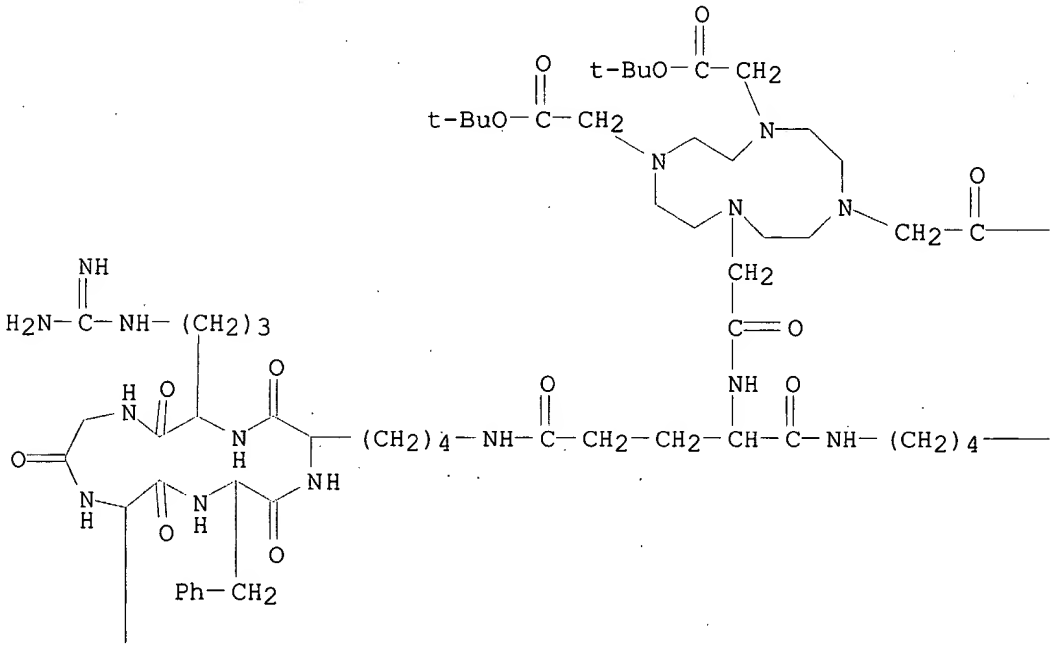

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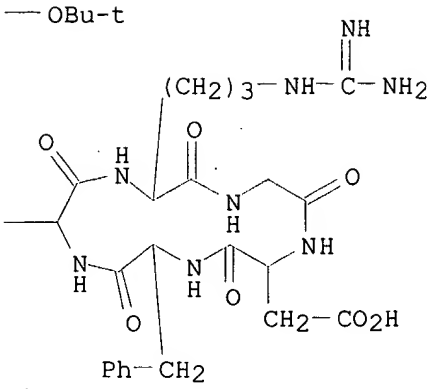

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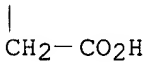

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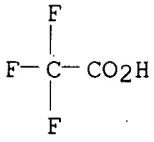

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(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

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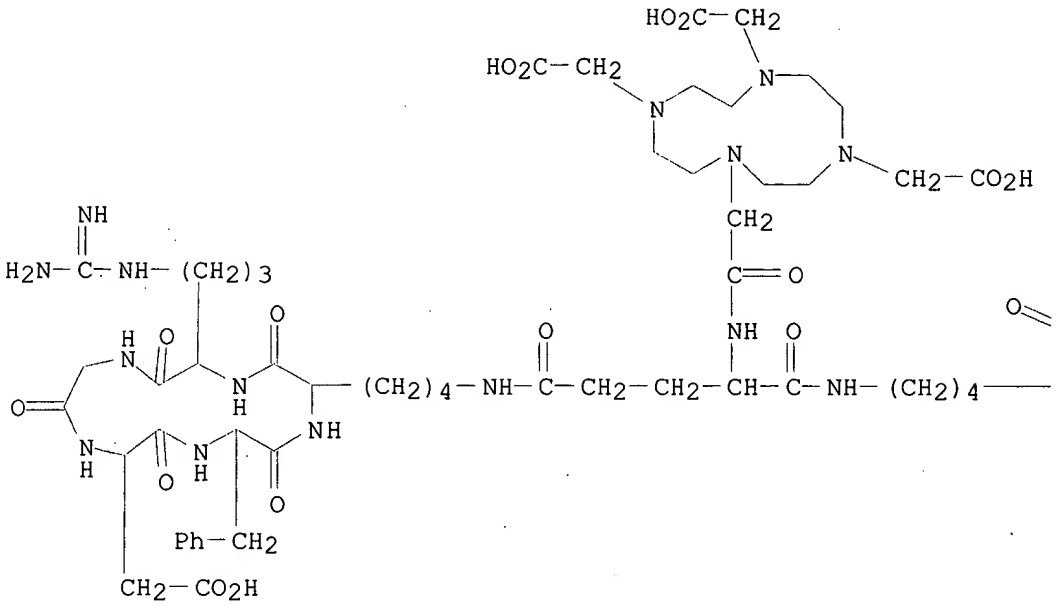

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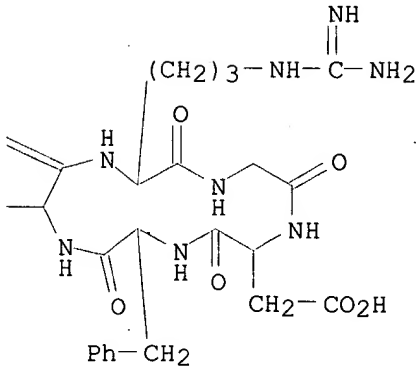

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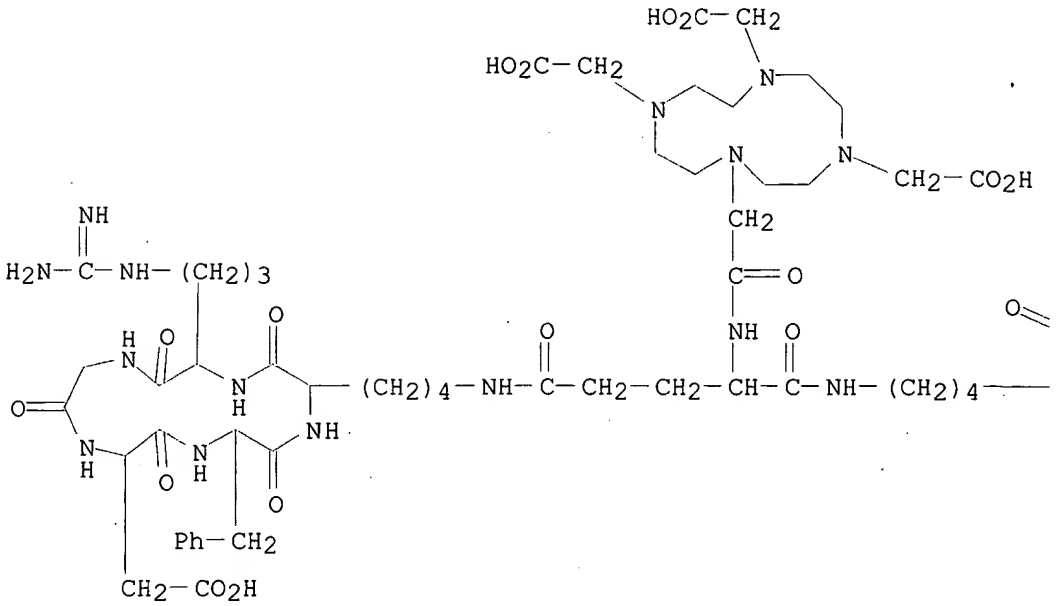

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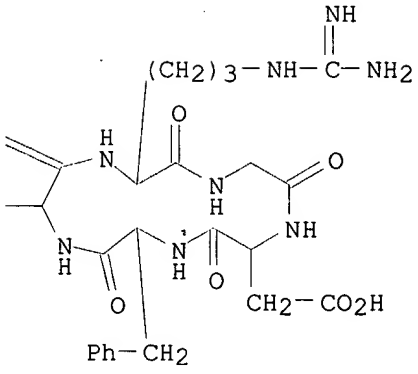

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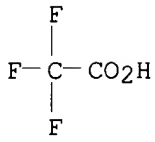
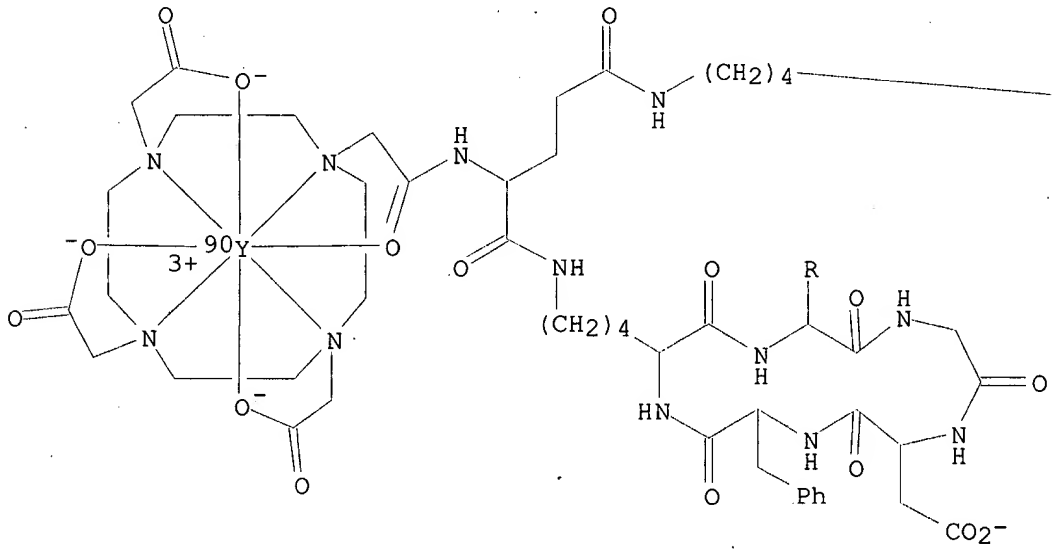


IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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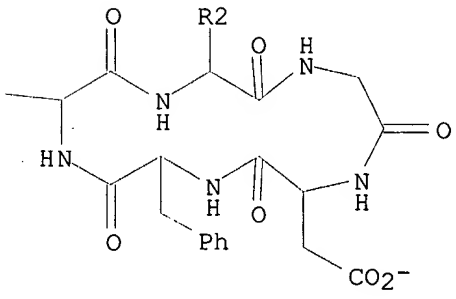

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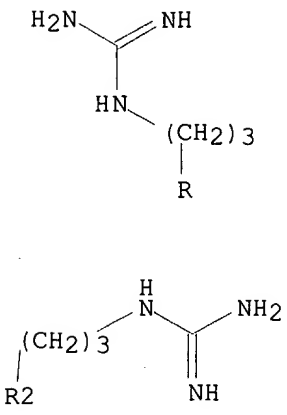

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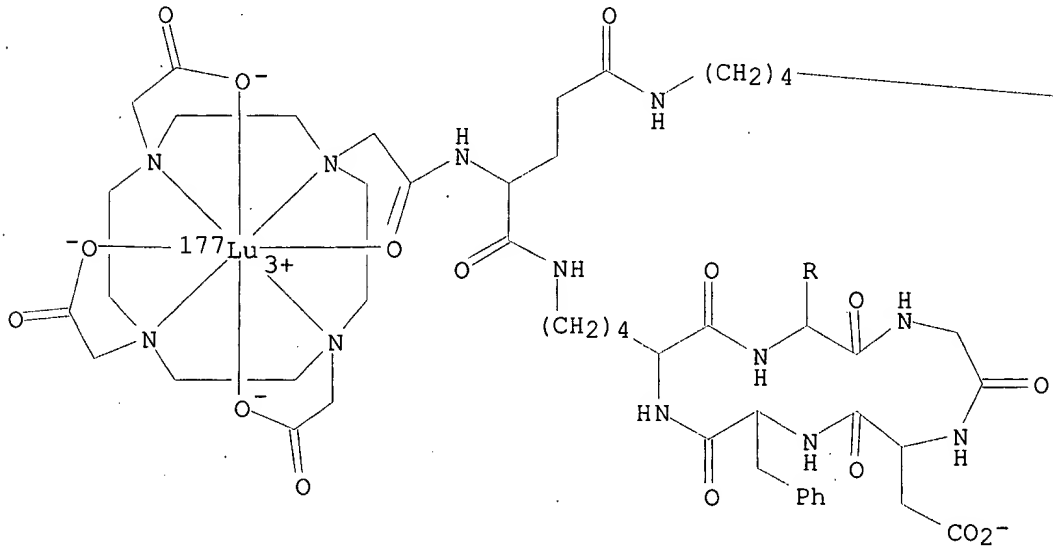

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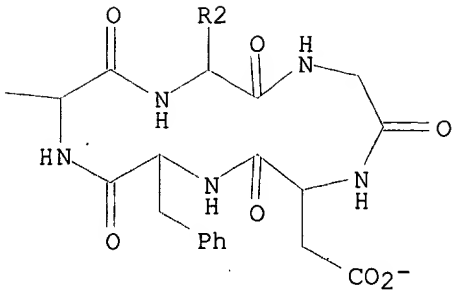

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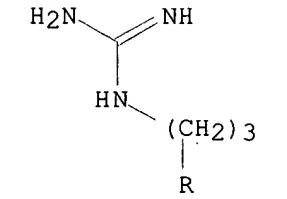

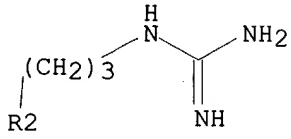

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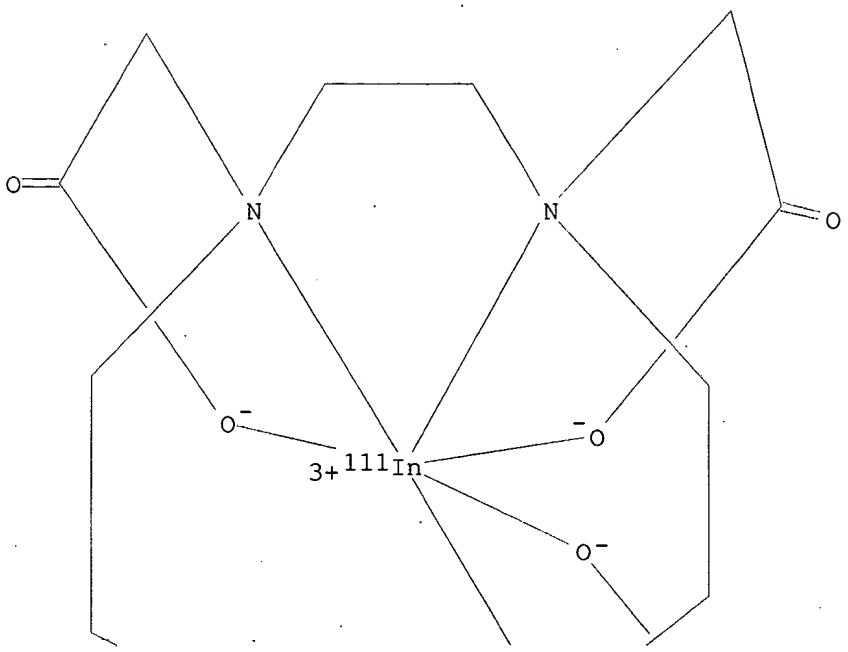
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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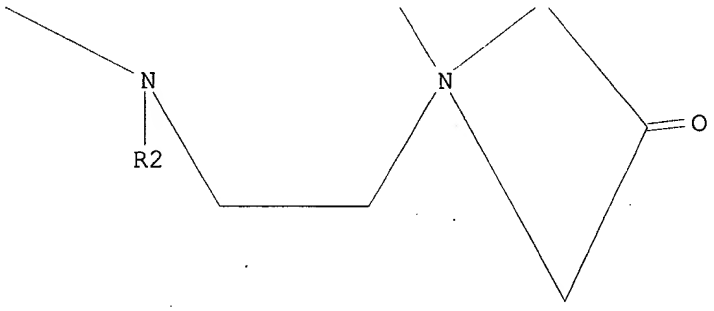
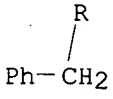
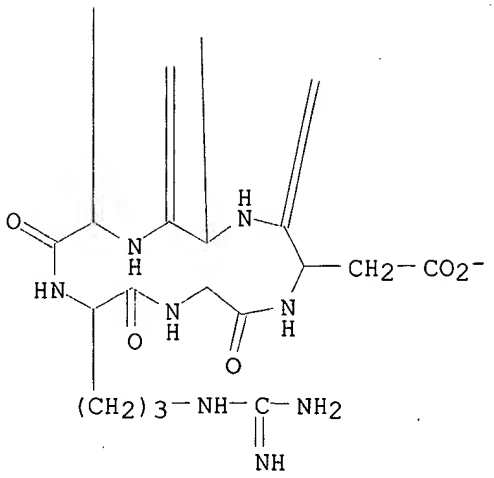




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



PAGE 4-A

●2 H^+

L52 ANSWER 11 OF 14 USPATFULL
AN 2001:214639 USPATFULL
TI Indazole vitronectin receptor antagonist pharmaceuticals
IN Rajopadhye, Milind, Westford, MA, United States
Harris, Thomas David, Salem, NH, United States
PA DuPont Pharmaceuticals Company, Wilmington, DE, United States (U.S. corporation)
PI US 6322770 B1 20011127
AI US 1999-281207 19990330 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dameron L.
LREP Dolan, Peter L.
CLMN Number of Claims: 70
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 6228
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention d ribs novel compounds of the formula:

(Q).sub.d --L.sub.n --C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

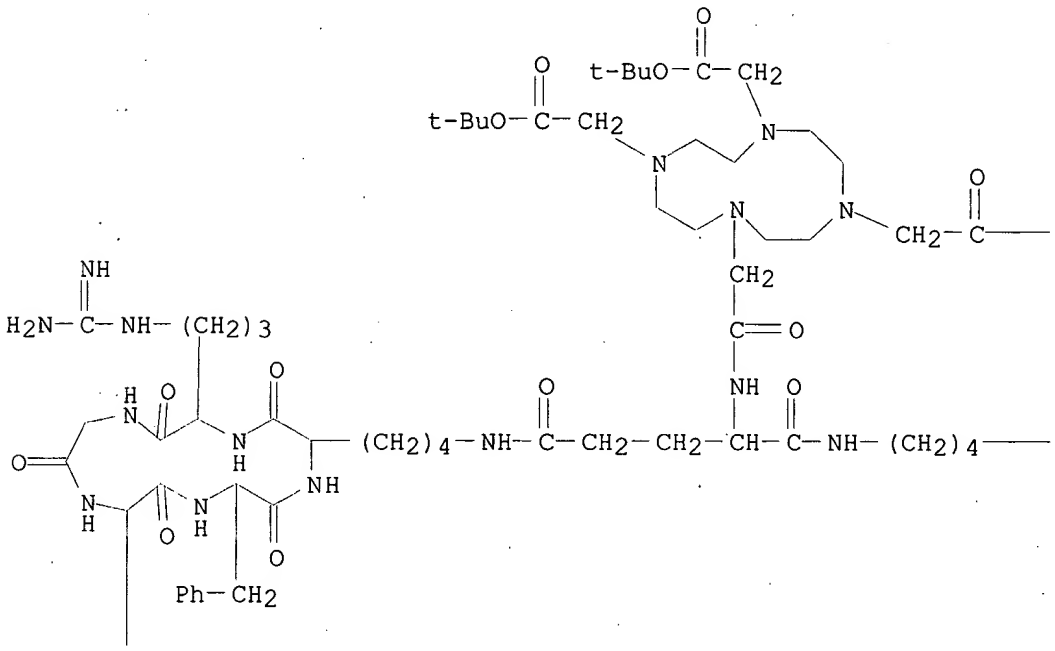
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

RN 250612-82-9 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

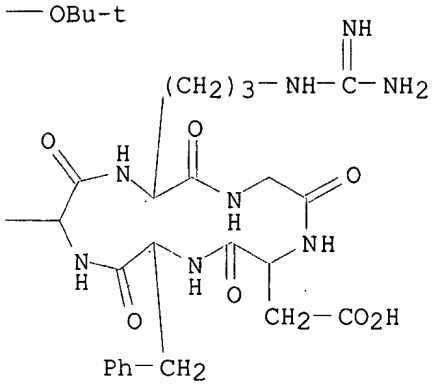
CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

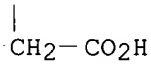
PAGE 1-A



PAGE 1-B

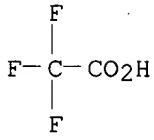


PAGE 2-A



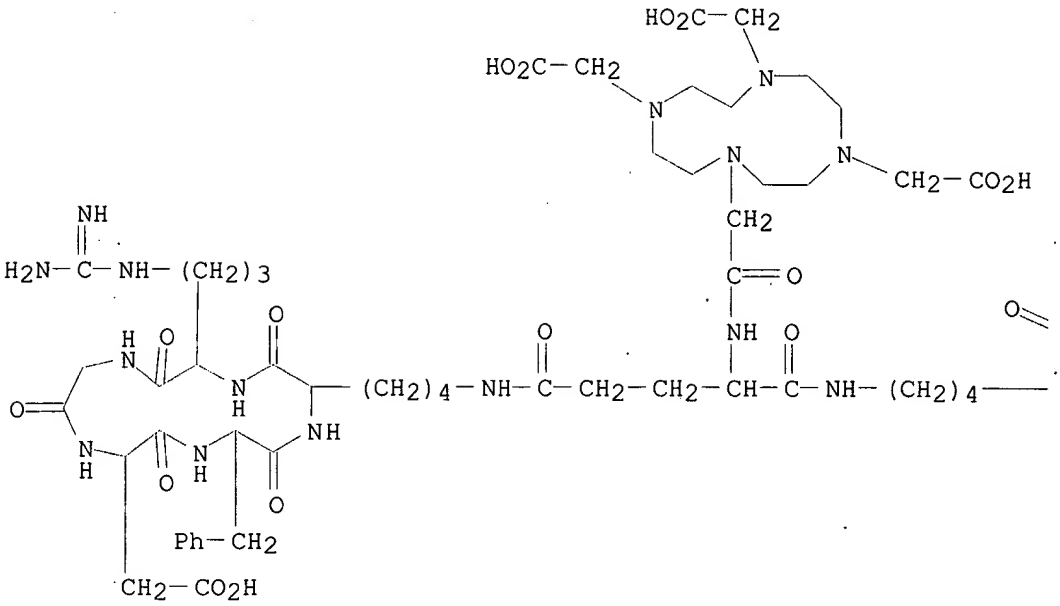
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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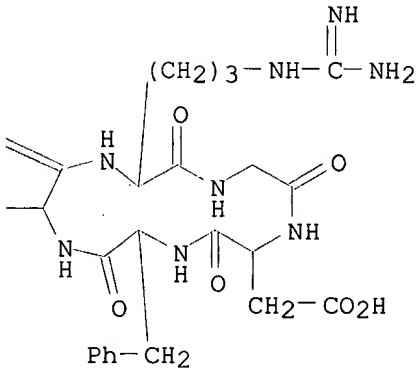
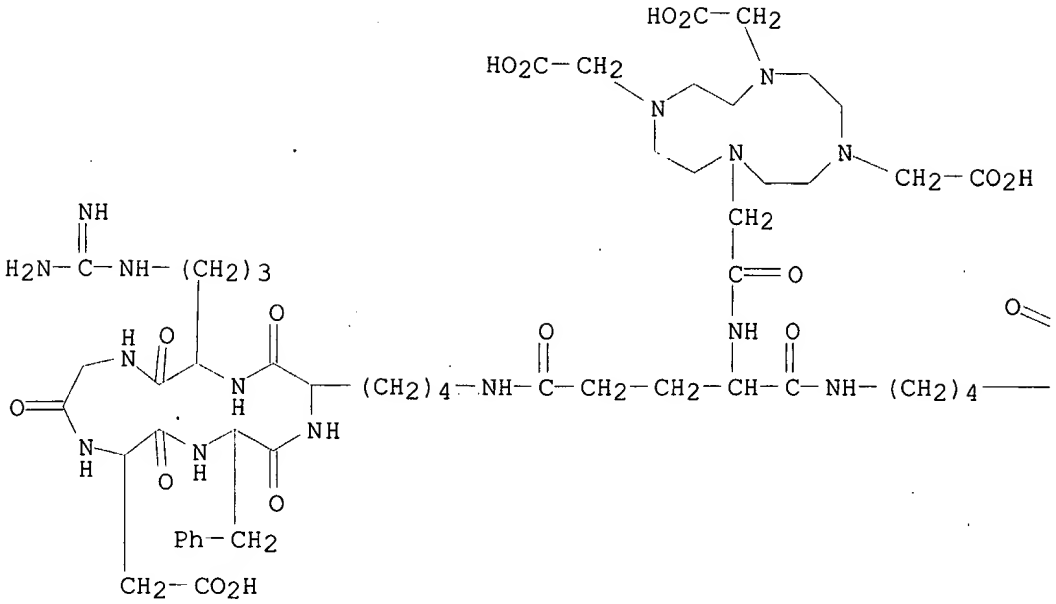


RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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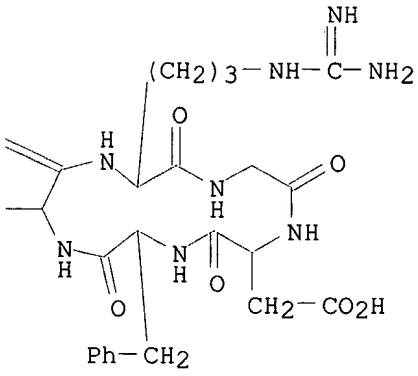
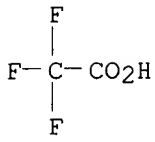


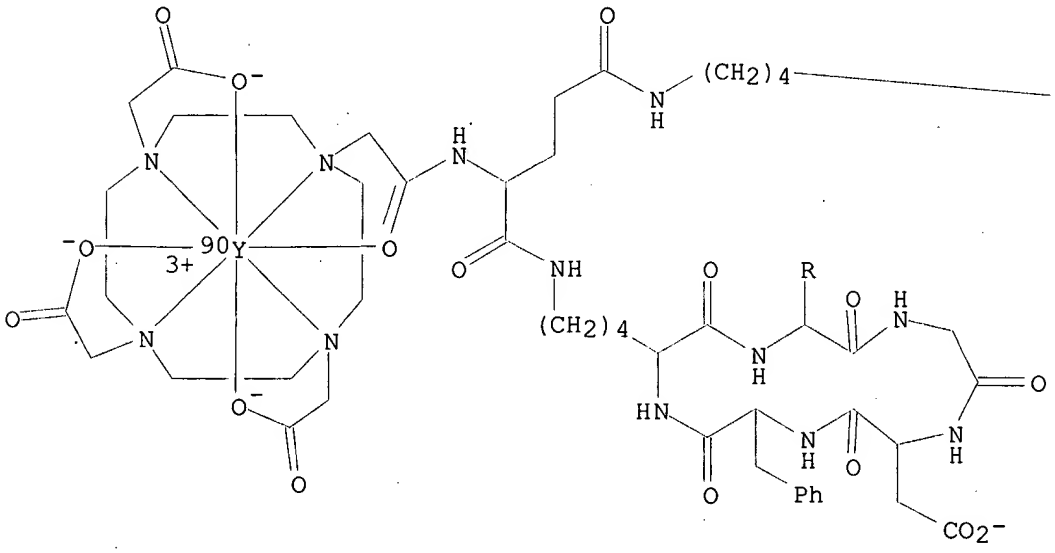
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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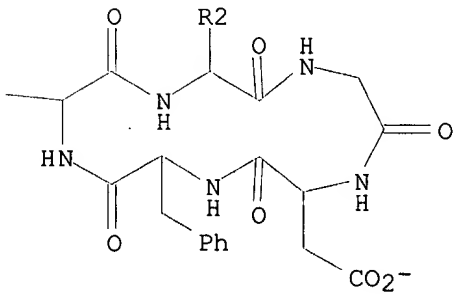
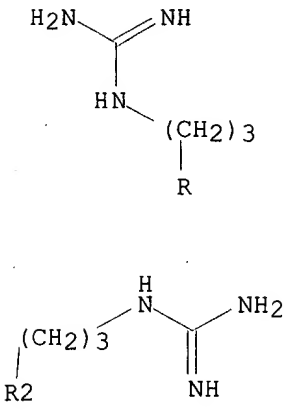


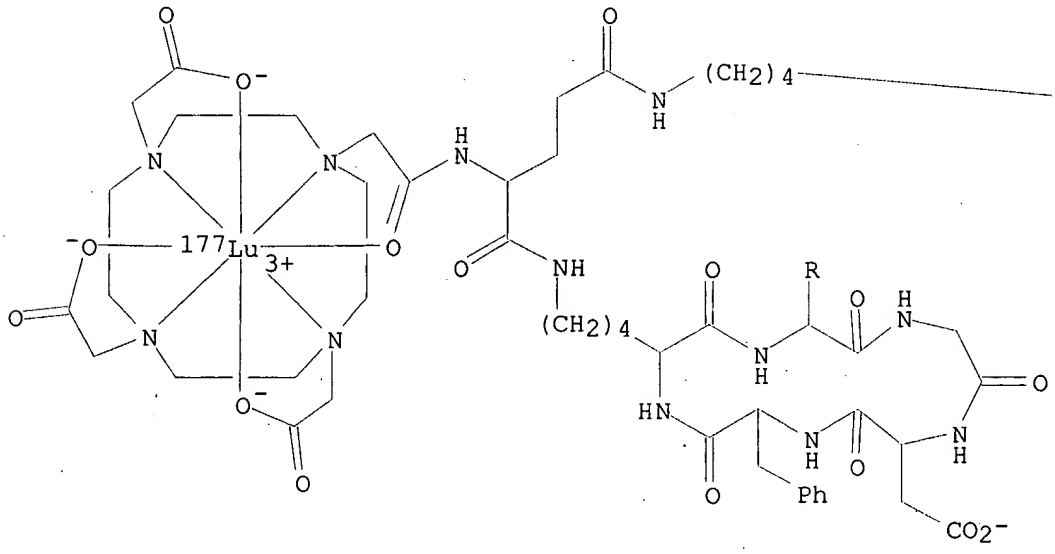
PAGE 2-A



●2 H^+

RN 250614-39-2 USPATFULL
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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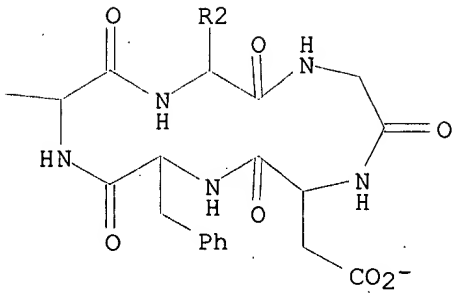
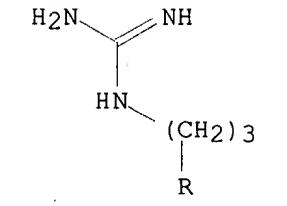
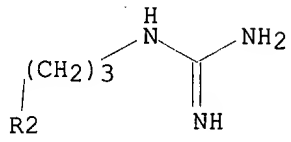


PAGE 2-A

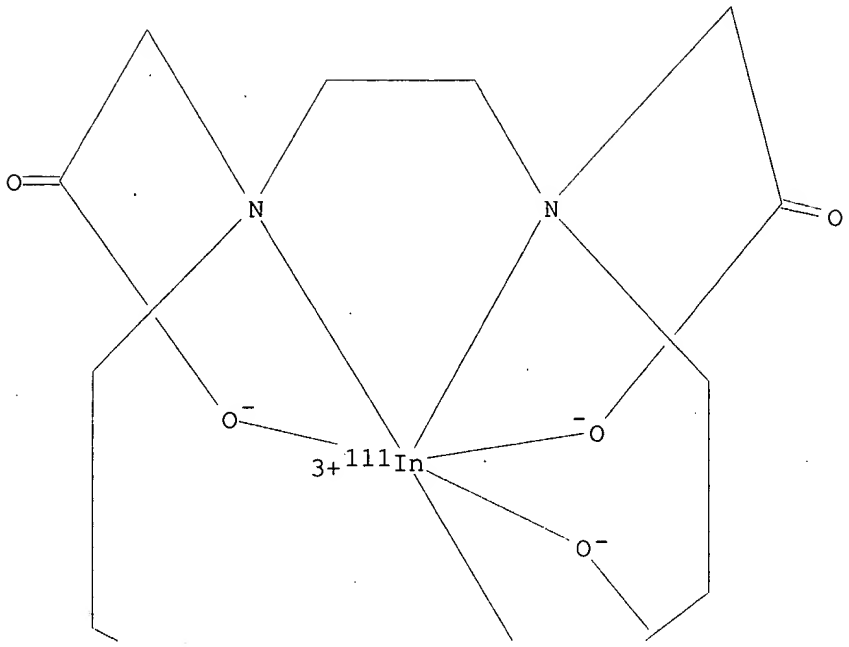




●2 H^+

RN 250614-40-5 USPATFULL
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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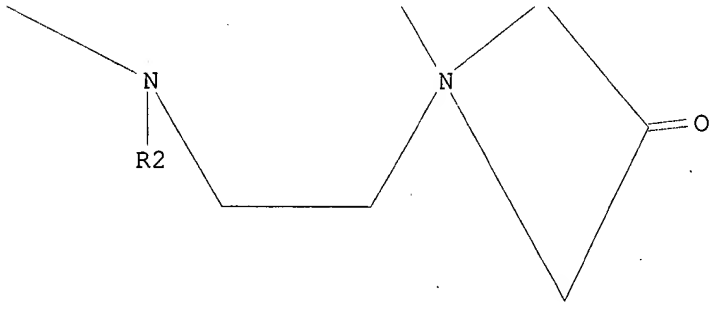
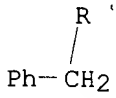
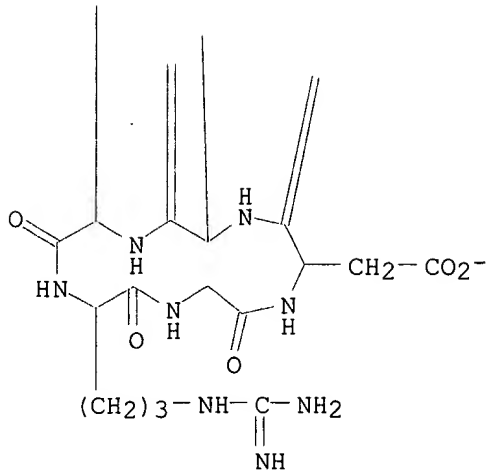




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



PAGE 4-A

●2 H^+

L52 ANSWER 12 OF 14 USPATFULL
AN 2001:133415 USPATFULL
TI DRIVING VOLTAGE GENERATOR OF LIQUID CRYSTAL DISPLAY UNIT
IN KAKUTA, RYOHEI, FUKUSHIMA-KEN, Japan
NAGAKUBO, HIDEAKI, FUKUSHIMA-KEN, Japan
TOKITA, SEIJI, FUKUSHIMA-KEN, Japan
YAMAZAKI, MITSUAKI, FUKUSHIMA-KEN, Japan
PI US 2001013864 A1 20010816
AI US 1998-112715 A1 19980709 (9)
PRAI JP 1997-184190 19970709
DT Utility
FS APPLICATION
LREP BRINKS HOFER GILSON & LIONE, P.O. BOX 10395, CHICAGO, IL, 60610
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 338
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB There is provided a small size and low price driving voltage generator (of a liquid crystal display unit) which can easily adjust output voltages. In this driving voltage generator, a DC-DC converter raises an input voltage (5 [V]) and produces voltages VH and VL. Resistors divide a voltage difference between the voltages VH and VL with resistors. Operational amplifiers output through current amplification each voltage divided by resistance. In the present invention, the external size can be reduced because only two output terminals are required for the DC-DC converter. In addition, manufacturing cost can be lowered because only two output terminals are required for the DC-DC converter. Moreover, since the resistors R1 to R6 are provided in the outside of the DC-DC converter (hybrid IC), these resistors can be exchanged easily. Therefore, the voltages V HCOM, V HSEG, V M, V LSEG, V LCOM can be adjusted easily.

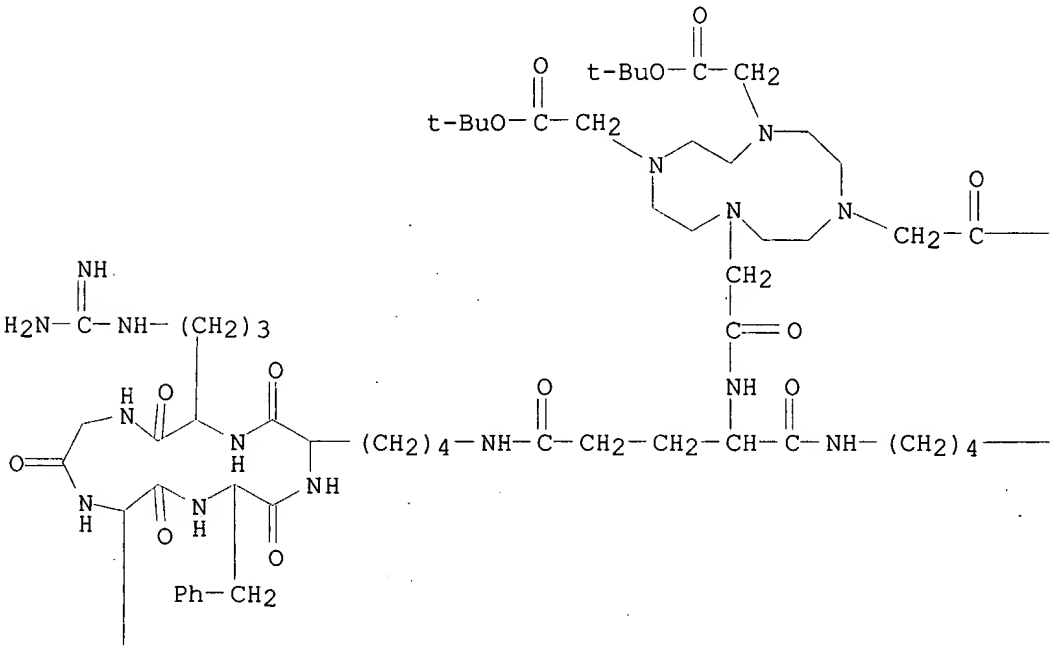
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 USPATFULL

CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

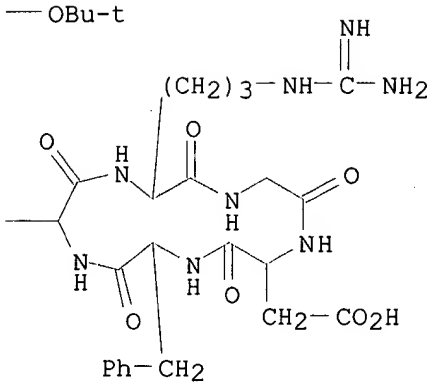
CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

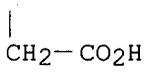
PAGE 1-A



PAGE 1-B

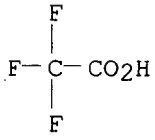


PAGE 2-A



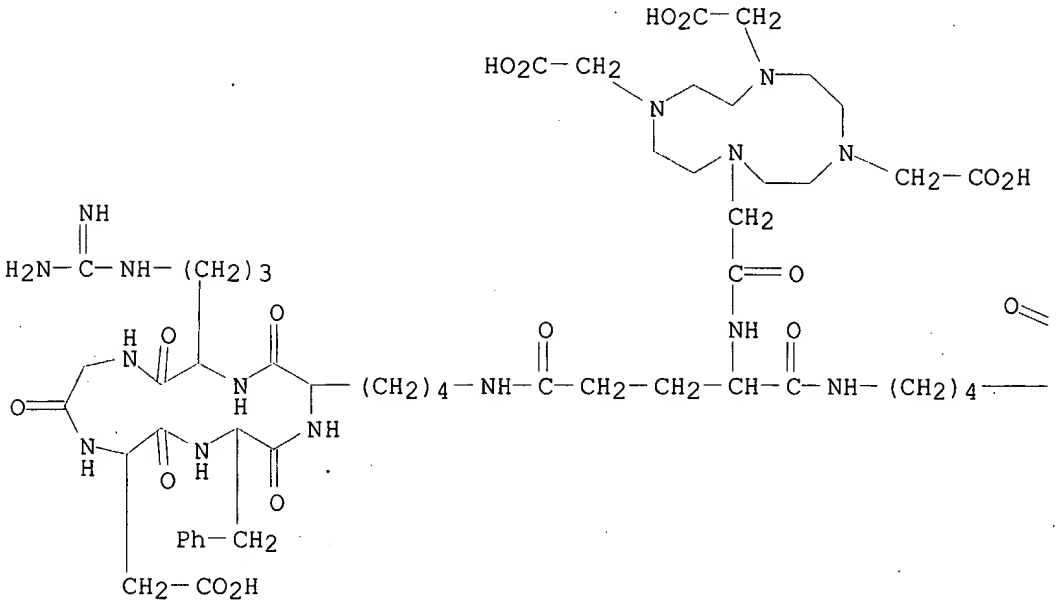
CM 2

CRN 76-05-1
CMF C2 H F3 O2

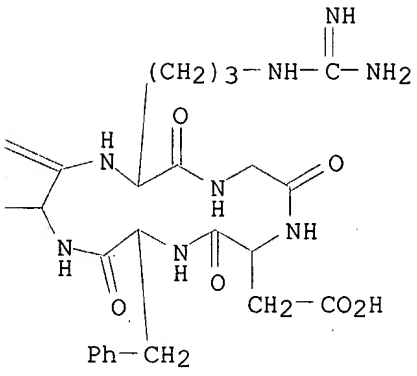


IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

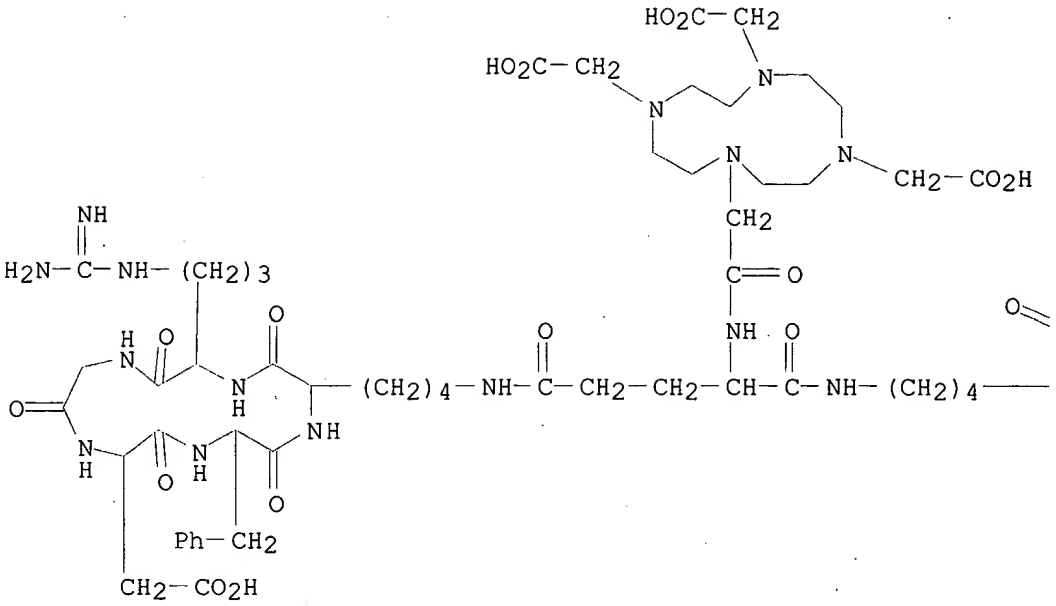


RN 250612-07-8 USPATFULL
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

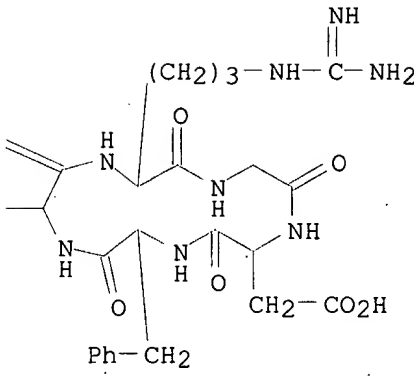
CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A

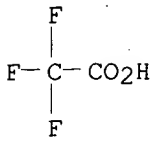


PAGE 1-B



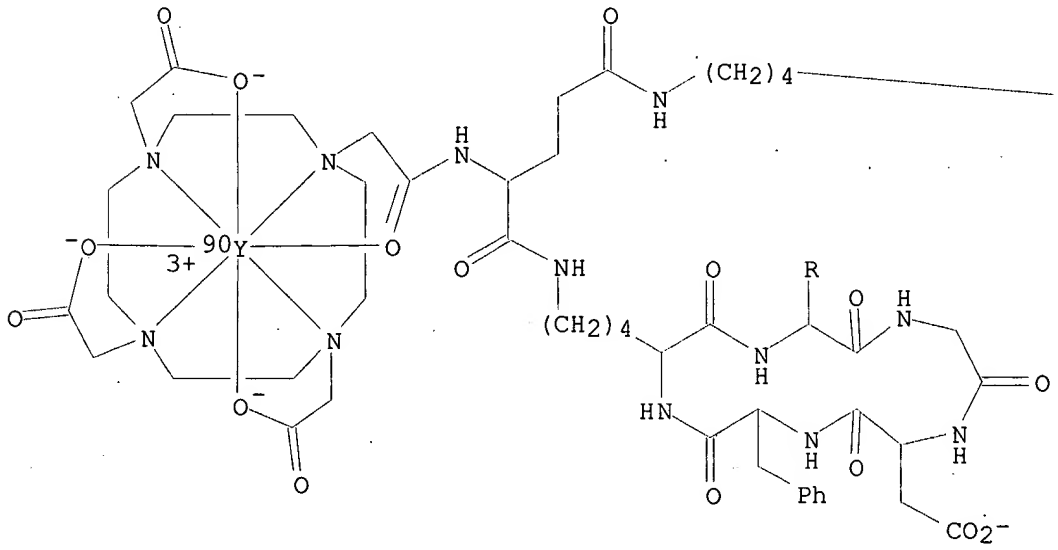
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 USPATFULL
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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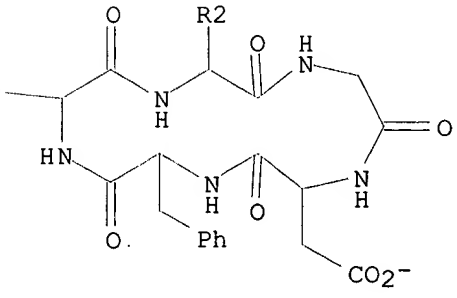

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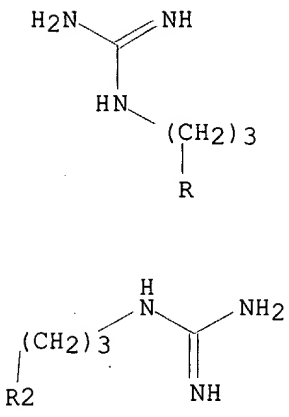
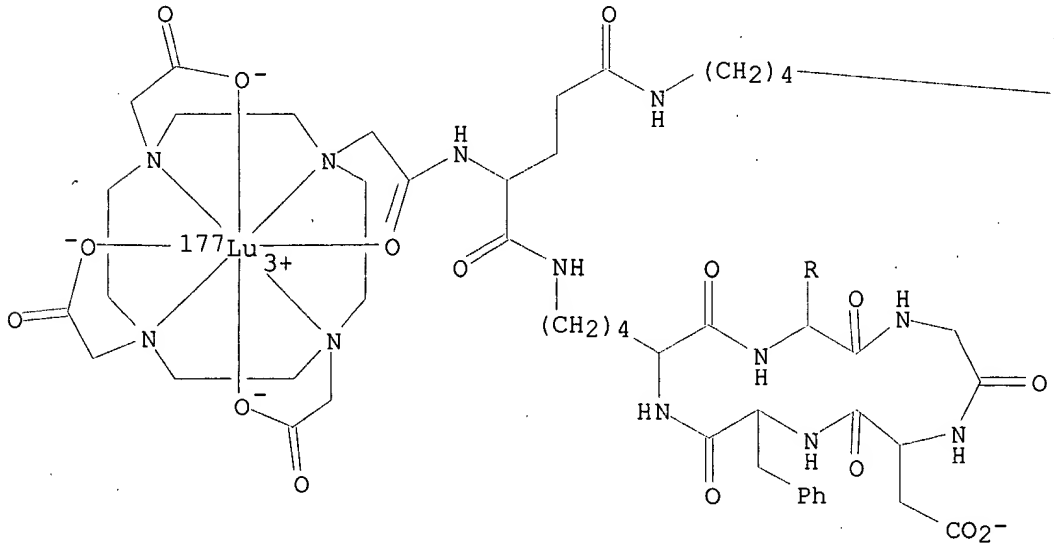


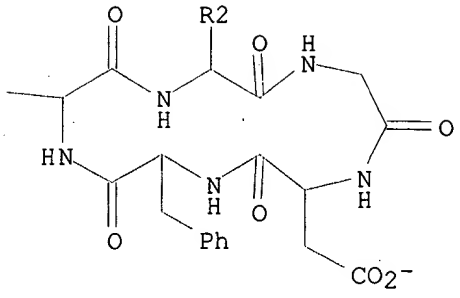
●2 H^+

RN 250614-39-2 USPATFULL
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



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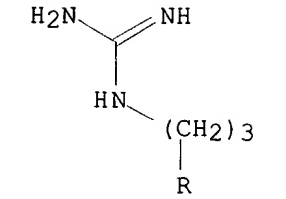

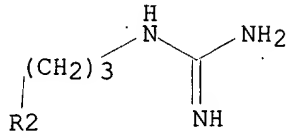

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RN 250614-40-5 USPATFULL
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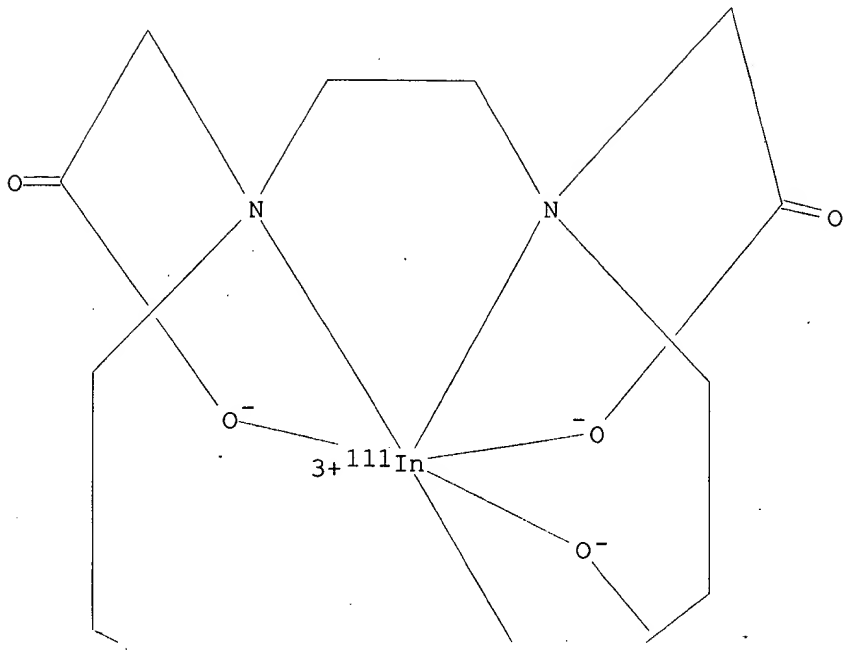
PAGE 1-A



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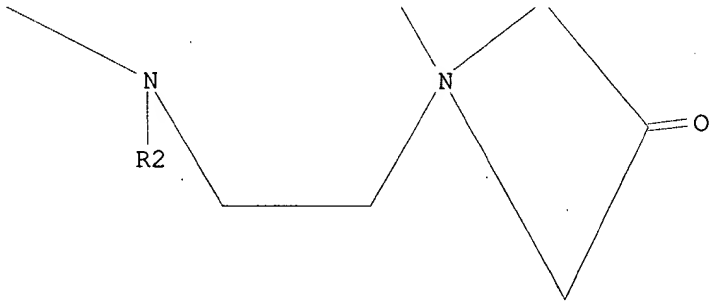

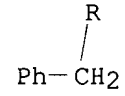

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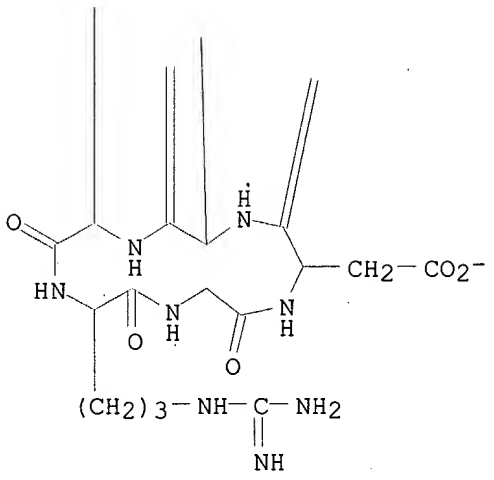

PAGE 4-A

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L52 ANSWER 13 OF 14 USPAT2
AN 2002:321986 USPAT2
TI Vitronectin receptor antagonist pharmaceuticals
IN Harris, Thomas D., Salem, NH, United States
Rajopadhye, Milind, Westford, MA, United States
PA Bristol-Myers Squibb Pharma Company, Princeton, NJ, United States (U.S. corporation)
PI US 6511648 B2 20030128
AI US 1999-465300 19991217 (9)
PRAI US 1998-112732P 19981218 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dameron L.
LREP O'Brien, Maureen P., Dolan, Peter L., Golian, Paul D.
CLMN Number of Claims: 125
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 8733
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The present invention further provides novel compounds useful for imaging atherosclerosis, restenosis, cardiac ischemia, and myocardial reperfusion injury. The present invention still further provides novel compounds useful for the treatment of rheumatoid arthritis. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or

diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

L52 ANSWER 14 OF 14 USPAT2
AN 2002:26835 USPAT2
TI Quinolone vitronectin receptor antagonist pharmaceuticals
IN Harris, Thomas David, Salem, NH, United States
PA Bristol-Myers Squibb Pharma Company, Princeton, NJ, United States (U.S. corporation)
PI US 6524553 B2 20030225
AI US 1999-281209 19990330 (9)
PRAI US 1998-80150P 19980331 (60)
US 1998-112715P 19981218 (60)
US 1998-112829P 19981218 (60)
US 1998-112732P 19981218 (60)
US 1998-112831P 19981218 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Jones, Dameron L.
LREP O'Brien, Maureen P., Dolan, Peter L., Golian, Paul D.
CLMN Number of Claims: 18
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 5742
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention describes novel compounds of the formula:

(Q).sub.d--L.sub.n--C.sub.h,

useful for the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compounds useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The pharmaceuticals are comprised of a targeting moiety that binds to a receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. The imageable moiety is a gamma ray or positron emitting radioisotope, a magnetic resonance imaging contrast agent, an X-ray contrast agent, or an ultrasound contrast agent.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **250612-82-9P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
IT **250612-06-7P 250612-07-8P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
IT **250614-38-1P 250614-39-2P 250614-40-5P**
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

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FILE COVERS 1907 - 4 Jun 2003 VOL 138 ISS 23
FILE LAST UPDATED: 3 Jun 2003 (20030603/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L62 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2003 ACS

AN 2003:235416 HCAPLUS
DN 138:255514
TI Pharmaceuticals for the imaging of angiogenic disorders for use in combination therapy
IN Rajopadhye, Milind; Edwards, D. Scott; **Barrett, John A.**; **Carpenter, Alan P., Jr.**; Harris, Thomas D.; Heminway, Stuart J.; **Liu, Shuang**; Singh, Prahlad R.
PA **Bristol-Myers Squibb Pharma Company, USA**
SO U.S., 86 pp., Cont.-in-part of U.S. Ser. No. 281,474.
CODEN: USXXAM
DT Patent
LA English
IC ICM A61K051-00
ICS A61M036-14
NCL 424001690; 424001110; 424001650; 424009100; 534014000
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 8, 63, 78
FAN.CNT 7

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PI	US 6537520	B1	20030325	US 2000-599295	20000621
	US 6322770	B1	20011127	US 1999-281207	19990330
	US 2002001566	A1	20020103	US 1999-281474	19990330
	US 2002015680	A1	20020207	US 1999-281209	19990330
	US 6524553	B2	20030225		
	US 6548663	B1	20030415	US 1999-281050	19990330
PRAI	US 1998-80150P	P	19980331		
	US 1998-112715P	P	19981218		
	US 1999-281474	A2	19990330		
	US 1998-112732P	P	19981218		
	US 1998-112829P	P	19981218		
	US 1998-112831P	P	19981218		

OS MARPAT 138:255514
AB Compds. (Q)d-(Ln)m-Ch (Q is a peptide, d = 1-10, Ln is a linking group, m = 0-1, Ch is a metal-bonding unit) were prepd. for use in the diagnosis and treatment of cancer in combination therapy in a patient. The present invention also provides novel compds. useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. The pharmaceuticals are comprised of a targeting moiety that binds to a

receptor that is upregulated during angiogenesis, an optional linking group, and a therapeutically effective radioisotope or diagnostically effective imageable moiety. Thus, cyclo{Arg-Gly-Asp-D-Tyr(N-[2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid]-3-aminopropyl)-Val} was prepd. by acylation of cyclo{Arg-Gly-Asp-D-Tyr(3-aminopropyl)-Val} with 2-[[[5-[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid monosodium salt and converted into radiopharmaceutical 99mTc(VnA)(tricine)(phosphine), where VnA represents the vitronectin receptor antagonist.

ST cyclic peptide radiolabeled prepn imaging angiogenic disorder; radiopharmaceutical cyclic peptide prepn vitronectin receptor antagonist anticancer agent

IT Imaging agents
(NMR contrast; prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Interferons
Interleukin 2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer agents as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT Peptides, preparation
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(cyclic; prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Angiogenesis
Antitumor agents
Human
Radiopharmaceuticals
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Vitronectin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Radiosensitizers, biological
(radiosensitizers as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT Neoplasm
Rheumatoid arthritis
(treatment of; prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.v.beta.3, disease assocd. with; prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 50-07-7, Mitomycin 57-22-7, Vincristine 57-83-0, Progesterone, biological studies 59-05-2, Methotrexate 125-84-8, Aminoglutethimide 147-94-4, Cytarabine 302-79-4, Tretinoin 434-07-1, Oxymetholone 488-41-5, Mitobronitol 566-48-3, Formestane 2363-58-8, Epitiostanol 3094-09-5, Doxifluridine 3778-73-2, Ifosfamide 4291-63-8, Cladribine 4533-39-5, Nitracrine 4759-48-2, Isotretinoin 6620-60-6, Proglumide 9014-02-2, Zinostatin 9034-40-6, Lhrf 9050-67-3, Sizofilan 10318-26-0, Mitolactol 10540-29-1, Tamoxifen 13311-84-7, Flutamide 13425-98-4, Improsulfan 14769-73-4, Levamisole 17902-23-7, Tegafur 18016-80-3, Lisuride 18883-66-4, Streptozocin 20830-81-3, Daunorubicin 21362-69-6, Mepitiostane 21416-67-1, Razoxane 22181-94-8, Butocin 23214-92-8, Doxorubicin 24279-91-2, Carboquone 29069-24-7, Prednimustine 29767-20-2, Teniposide 33419-42-0, Etoposide 39325-01-4, Picibanil 41575-94-4, Carboplatin 42471-28-3, Nimustine

51264-14-3, Amsacrine 53643-48-4, Vindesine 53910-25-1, Pentostatin 54350-48-0, Etretinate 55726-47-1, Enocitabine 58337-35-2, Elliptinium acetate 61422-45-5, Carmofur 62304-98-7, Thymalfasin 71486-22-1, Vinorelbine 74050-98-9, Ketanserin 81627-83-0, Colony stimulating factor-1 81840-15-5, Vesnarinone 83869-56-1, Colony stimulating factor-2 90357-06-5, Bicalutamide 92118-27-9, Fotemustine 95058-81-4, Gemcitabine 95734-82-0, Nedaplatin 98631-95-9, Sobuzoxane 102676-47-1, Fadrozole 104958-90-9 108001-60-1 112809-51-5, Letrozole 112887-68-0, Raltitrexed 120287-85-6, Cetrorelix 173146-27-5, Denileukin diftitox
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer agents as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT 202930-91-4P 250611-72-4P 250611-73-5P 250611-74-6P 250611-75-7P
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RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

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RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 108-30-5, reactions 288-88-0, 1H-1,2,4-Triazole 5437-45-6, Benzyl bromoacetate 5704-04-1, Tricine 23911-26-4, Diethylenetriaminepentaacetic dianhydride 63995-70-0, Tppts 63995-75-5, TPPMS 64018-22-0, TPPDS 122555-91-3 161552-03-0 180468-25-1 186305-11-3 194920-62-2 250612-83-0D, resin-bound 250612-84-1D, resin-bound 250612-85-2D, resin-bound 250612-86-3 250612-87-4 250612-88-5D, resin-bound 250612-89-6D, resin-bound 250612-90-9D, resin-bound 250612-92-1D, resin-bound 250612-93-2D, resin-bound 250612-94-3
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(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 137076-54-1P 192635-89-5P 246234-73-1P 250612-28-3P 250612-30-7P
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250612-46-5P 250612-48-7P 250612-50-1P 250612-51-2P 250612-52-3P
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250612-78-3P 250612-80-7P **250612-82-9P** 250636-75-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
IT 22541-90-8, reactions
RL: RGT (Reagent); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
IT 250614-59-6P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
IT 63-89-8 7091-44-3 250612-27-2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
IT **10098-91-6**, y90, biological studies 13967-64-1, Dy165, biological studies 13967-65-2, Ho166, biological studies 13981-28-7, La140, biological studies 14041-42-0, Gd159, biological studies 14041-44-2, Yb175, biological studies 14158-31-7, i125, biological studies 14269-78-4, Yb169, biological studies 14378-26-8, Re188, biological studies 14391-11-8, Au199, biological studies 14694-69-0, Ir192, biological studies 14913-49-6, Bi212, biological studies 14913-89-4, Rh105, biological studies 14914-12-6, Lu 174, biological studies 14967-68-1, Pd103, biological studies 14981-64-7, Pd109, biological studies 14998-63-1, Re186, biological studies 15749-66-3, p33, biological studies 15756-45-3, Au192, biological studies 15757-86-5, Cu67, biological studies 15760-04-0, Ag111, biological studies 15765-31-8, Pm149, biological studies 15766-00-4, Sm153, biological studies 15840-01-4, Dy166, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radioisotope for use with peptide derivs. for the treatment of cancer in combination therapy)
IT 22668-01-5 27314-97-2, 3-Amino-1,2,4-benzotriazine-1,4-dioxide 70132-50-2 88876-88-4
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radiosensitizers as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)
RE.CNT 110 THERE ARE 110 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Albert; US 5650134 A 1997 HCAPLUS
(2) Allen; US 6056973 A 2000 HCAPLUS
(3) Anon; EP 0107734 1987 HCAPLUS
(4) Anon; CA 2113245 1988 HCAPLUS
(5) Anon; EP 0359347 1990 HCAPLUS
(6) Anon; EP 0436005 1991 HCAPLUS
(7) Anon; CA 2039259 1991 HCAPLUS
(8) Anon; EP 0606683 1994 HCAPLUS
(9) Anon; CA 2156620 1994 HCAPLUS
(10) Anon; DE 4311023 1994 HCAPLUS
(11) Anon; AU 5314694 1994
(12) Anon; EP 0727225 1996 HCAPLUS
(13) Anon; DE 19536781 1997 HCAPLUS
(14) Anon; DE 19536785 1997 HCAPLUS
(15) Anon; CA 2232315 1997 HCAPLUS
(16) Anon; DE 19725368 1998 HCAPLUS
(17) Anon; Drugs of the Future 2000, V7(25), P674
(18) Anon; Nucl Med, Proceeding of the 42nd Annual Meeting 1995, V36(5, 287), P71P
(19) Ashton; J Org Chem 1996, V61, P903 HCAPLUS
(20) Bakker; Life Sci 1991, V49, P1583 HCAPLUS
(21) Batt; J Med Chem 2000, V43, P41 HCAPLUS
(22) Bergstein; US 4988827 A 1991 HCAPLUS

(23) Bevilacqua; US 5403713 A 1995 HCAPLUS
(24) Bevilacqua; Proc Natl Acad Sci 1987, V84, P9238 HCAPLUS
(25) Bousquet; Radiology 1988, V166, P693 HCAPLUS
(26) Brechbiel, M; Bioconjugate Chem 1991, V2, P187 HCAPLUS
(27) Brechbiel, M; J Chem Soc Perkin Trans 1992, V1, P1175
(28) Bridger; US 5350837 A 1994 HCAPLUS
(29) Brooks; US 5766591 A 1998 HCAPLUS
(30) Burke, P; Cancer 2002, Vsuppl 4(94), P1320
(31) Burris; Clin Can Res 1995, V1, P1623
(32) Burrows; Cancer Research 1992, V52, P5954 HCAPLUS
(33) Burrows; Journal of Controlled Release 1994, V28(1), P195
(34) Burrows; Porch Nat Acad Sci, USA 1993, V90, P8996 HCAPLUS
(35) Cacheris; US 5087440 A 1992 HCAPLUS
(36) Clauss; Journal of Biological Chemistry 1990, V265(12), P7078 HCAPLUS
(37) Degrado; J Org Chem 1980, V45, P1295 HCAPLUS
(38) Denardo; Cancer Biotherapy & Radiopharm 2000, V15(1), P71 HCAPLUS
(39) Denekamp; Br J Cancer 1982, V46, P711 MEDLINE
(40) Denekamp, J; Acta Radiologica Oncology 1984, P217 MEDLINE
(41) Denekamp, J; Br J Cancer 1982, V45, P136 MEDLINE
(42) Deshpande, S; J Nucl Med 1990, V31, P473 HCAPLUS
(43) Dizio; Bioconjugate Chem 1991, V2, P353 HCAPLUS
(44) Duggan; US 6040311 A 2000 HCAPLUS
(45) Dvorak; Cancer Cells 1991, V3, P77 MEDLINE
(46) Flanagan; US 5556939 A 1996 HCAPLUS
(47) Folkman, J; Nature Medicine 1995, V1, P27 HCAPLUS
(48) Friedlander; Science 1995, V270, P1500 HCAPLUS
(49) Gansow; US 4472509 A 1984 HCAPLUS
(50) Garin-Chesa; US 5342757 A 1994 HCAPLUS
(51) Ghose; Meth Enzymology 1983, V93, P280 HCAPLUS
(52) Gries; US 5021236 A 1991 HCAPLUS
(53) Hans-Hermann, H; Int J Cancer 1986, V38, P481
(54) Haubner; V313 Nuclear-Medizin 1997
(55) Henry, T; J Amer College Cardiology 1998, V810-1(31), P65A
(56) Hollister; US 5801228 A 1998 HCAPLUS
(57) Horton; Int J Biochem Cell Biol 1997, V29(5), P721 HCAPLUS
(58) Hu; Oncology Research 1994, V6(7), P321 HCAPLUS
(59) Hubbrich; Liebigs Ann Chem 1979, P776
(60) Jadhav; US 5760028 A 1998 HCAPLUS
(61) Juliana, D; Cancer Meta Rev 1990, V9, P267
(62) Keana; US 5412148 A 1995 HCAPLUS
(63) Keana; US 5567411 A 1996 HCAPLUS
(64) Kennel; Nuclear Medicine & Biology 1998, V25, P241 HCAPLUS
(65) Kerning; Euro J Uncle Med 1993, V20, P716
(66) Kerr; Anticancer Research 1999, V19(2A), P958
(67) Klaveness; US 6051207 A 2000 HCAPLUS
(68) Knowles; Analytical Biochemistry 1987, V160, P440 HCAPLUS
(69) Krenning; Digestion 1996, V57, P57 HCAPLUS
(70) Kruper; US 5064956 A 1991 HCAPLUS
(71) Kuntz; US 4248802 A 1981 HCAPLUS
(72) Liu; Inorg Chem 1999, V38(6), P1326 HCAPLUS
(73) Liu, S; Bioconjugate Chemistry 2001, V4(12), P559
(74) Long; US 5804161 A 1998 HCAPLUS
(75) Love; US 5281704 A 1994 HCAPLUS
(76) Love; US 5679810 A 1997 HCAPLUS
(77) Lyle; US 5382654 A 1995 HCAPLUS
(78) Manning; Tet Lett 1997, V53, P11937 HCAPLUS
(79) Margerstadt; Magn Reason Med 1986, V3, P808
(80) Molema; Biochemical Pharmacology 1998, V55, P1939 HCAPLUS
(81) Morgan; US 5376356 A 1994 HCAPLUS
(82) Mueller; Proc Natl Acad Sci USA 1992, V89, P11832 HCAPLUS
(83) Nosco; US 5520904 A 1996 HCAPLUS
(84) Olson; Int J Cancer 1997, V73, P865 HCAPLUS
(85) Orlando; J of Biological Chemistry 1991, V266(29), P19543 HCAPLUS

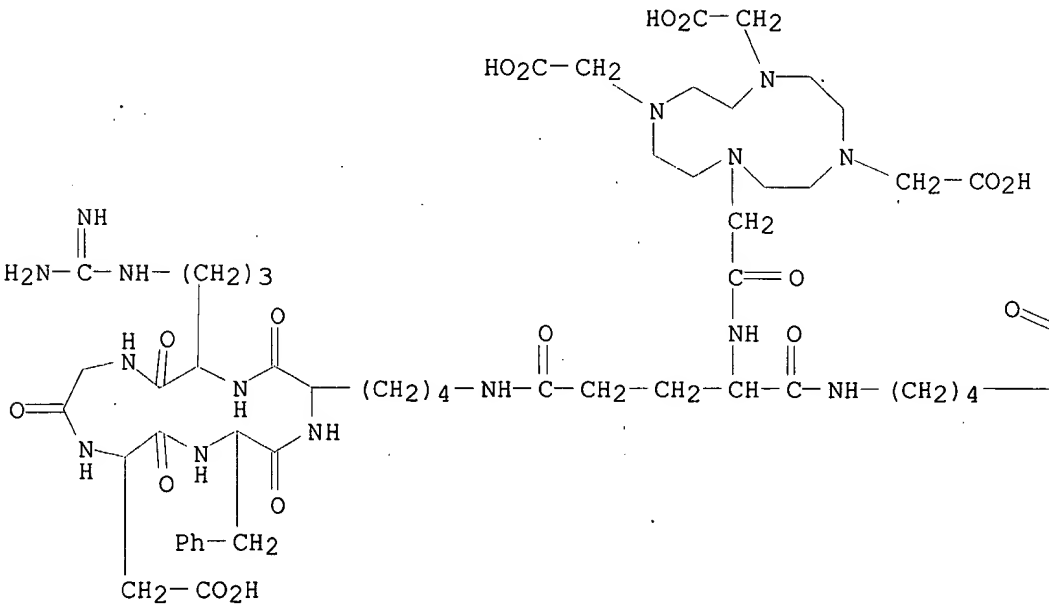
(86) O'Reilly; Cell 1994, V79, P315 HCAPLUS
(87) O'Reilly; Cell 1997, V88, P277 HCAPLUS
(88) Pollak; US 5659041 A 1997 HCAPLUS
(89) Ranney; US 5155215 A 1992 HCAPLUS
(90) Runge; Radiology 1988, V166, P835 HCAPLUS
(91) Sakamoto; US 4536387 A 1985 HCAPLUS
(92) Sellke; Drugs 1999, V58(3), P391 HCAPLUS
(93) Senger; US 5659013 A 1997 HCAPLUS
(94) Senger; Proc Natl Acad, Sci USA 1997, V94, P13612 HCAPLUS
(95) Sipkins; Nature Medicine 1998, V4(5), P623 HCAPLUS
(96) Snow; US 5760191 A 1998 HCAPLUS
(97) Srivatsa; Cardiovascular Res 1997, V36, P408 MEDLINE
(98) Stuttle; US 5395609 A 1995 HCAPLUS
(99) Takashima, S; J Cline Invest 1994, V93, P662
(100) Thorpe; US 5660827 A 1997 HCAPLUS
(101) Thorpe; US 5776427 A 1998 HCAPLUS
(102) Thorpe; US 5855866 A 1999 HCAPLUS
(103) Thorpe; US 5863538 A 1999 HCAPLUS
(104) Thorpe; US 6051230 A 2000 HCAPLUS
(105) Thorpe; Breast Cancer Research & Treatment 1995, V36(2), P237 MEDLINE
(106) Toner; US 4859777 A 1989 HCAPLUS
(107) Tweedle; US 6143274 A 2000
(108) van Waes; International Journal of Oncology 2000, V16, P1189 HCAPLUS
(109) Wallace; US 5417959 A 1995 HCAPLUS
(110) Wellicome; J Immunol 1990, V144(7), P2558 HCAPLUS

IT **250612-06-7P 250612-07-8P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

RN 250612-06-7 HCAPLUS

CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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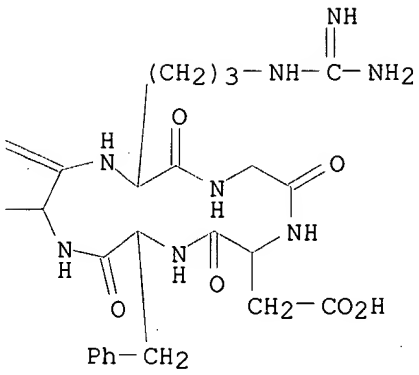

RN 250612-07-8 HCAPLUS
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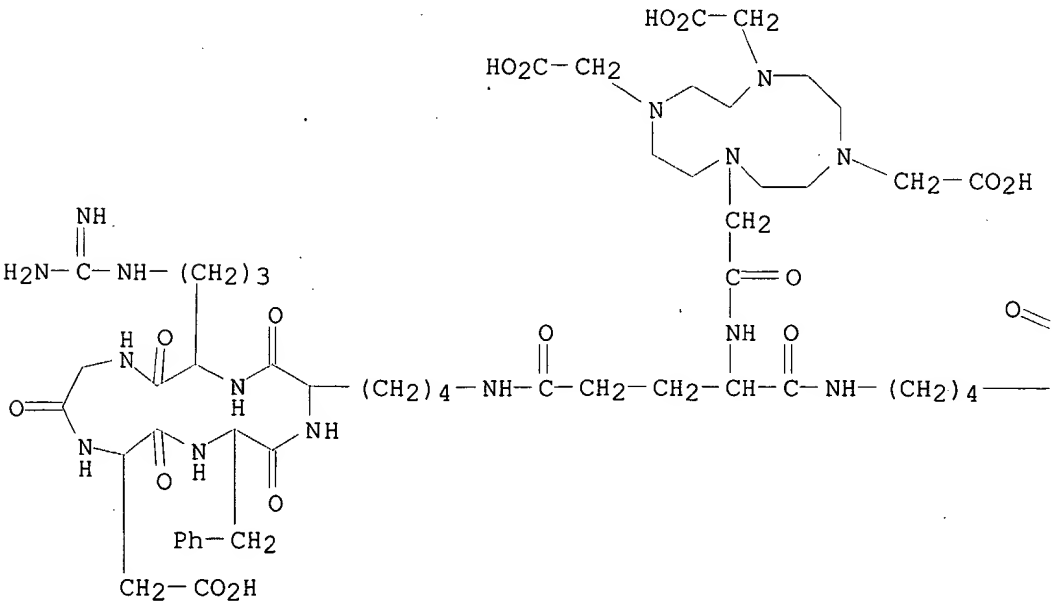
CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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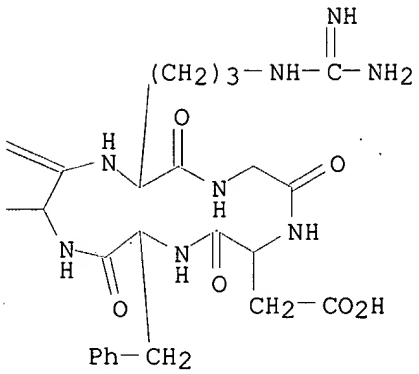

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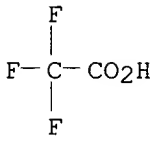
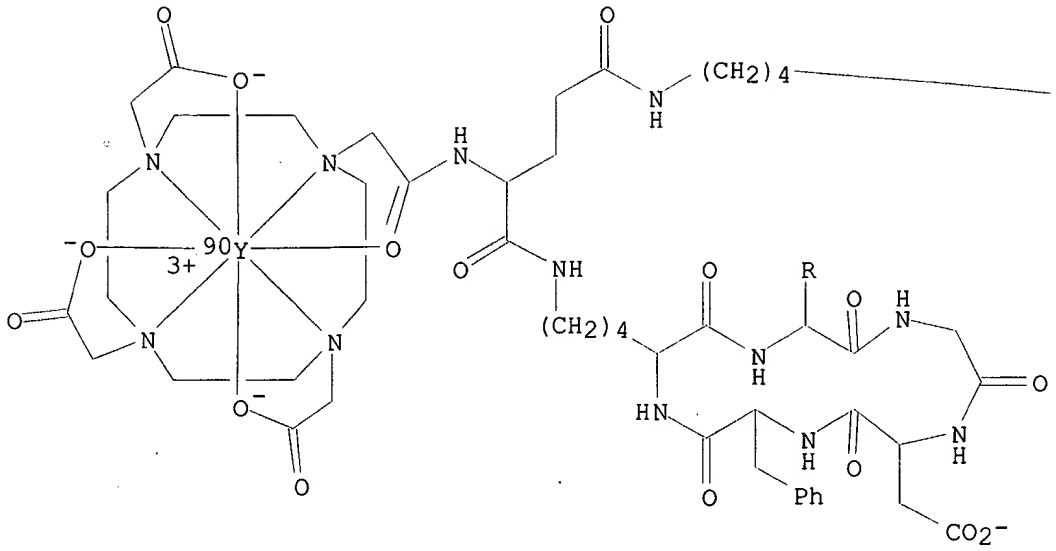
CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P 250614-39-2P 250614-40-5P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
RN 250614-38-1 HCAPLUS
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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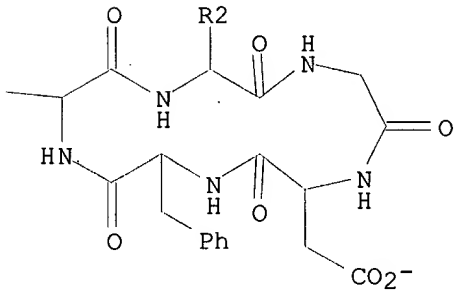

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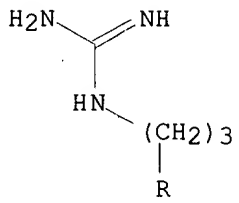

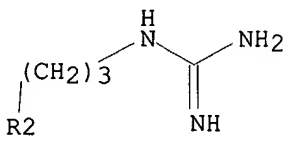

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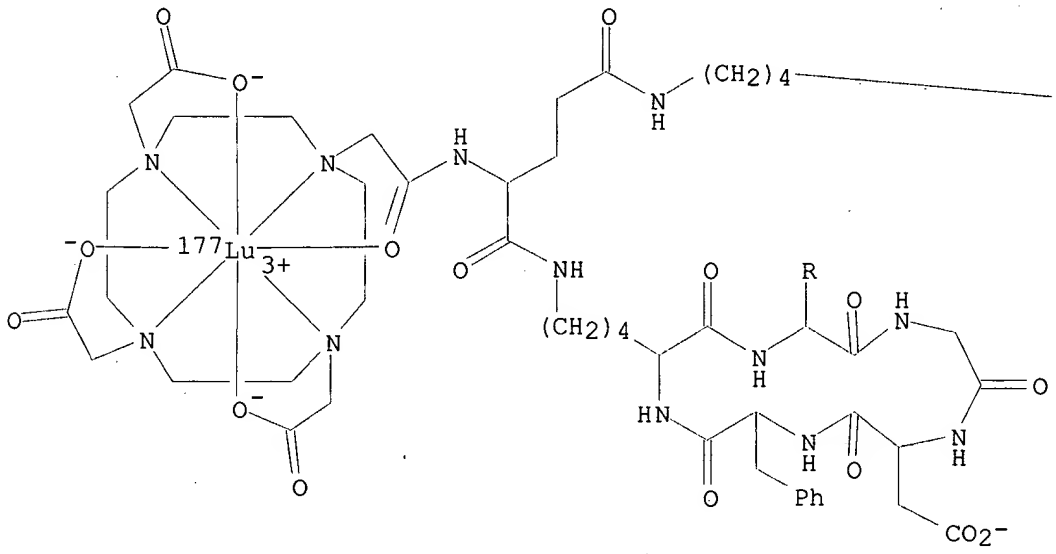
PAGE 1-A



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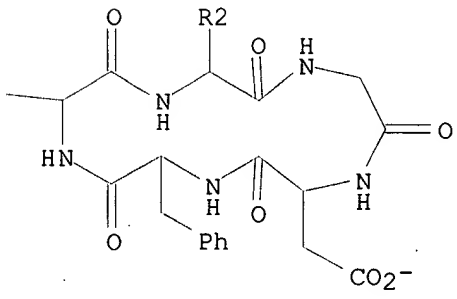

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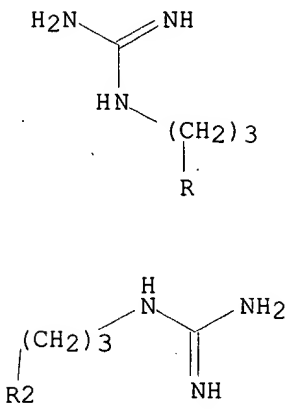

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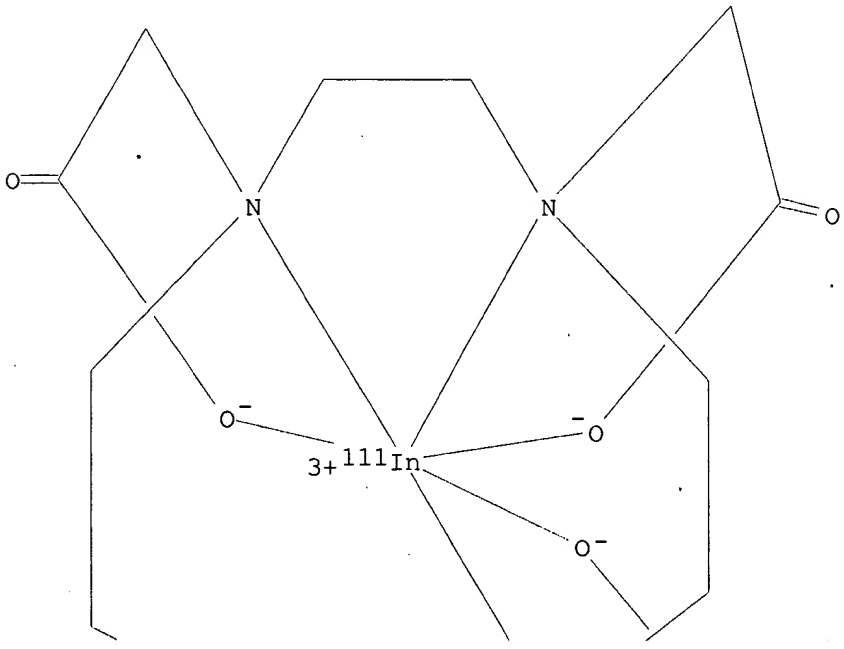
PAGE 1-A



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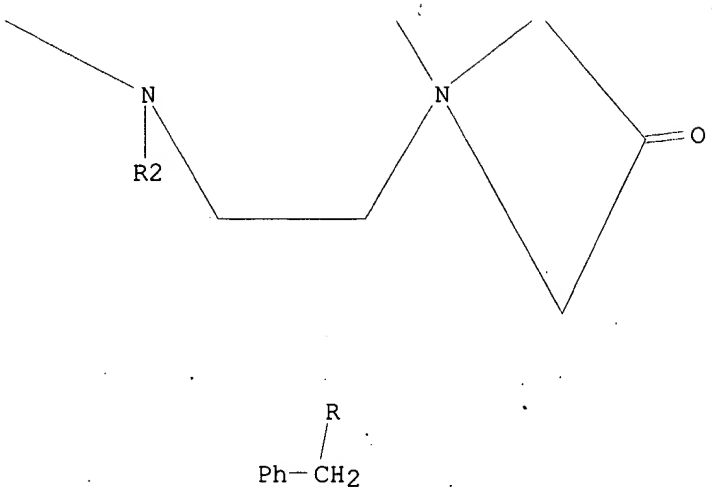
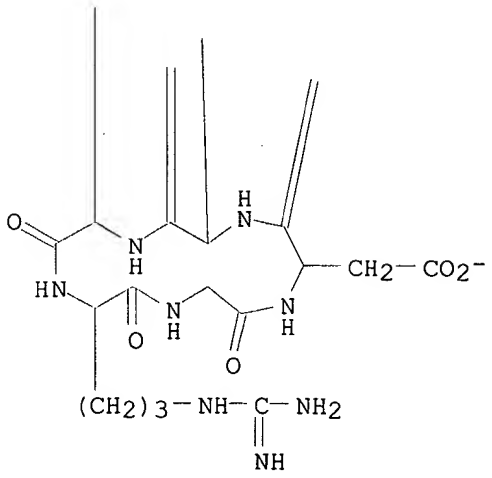


* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 4-A



2 H^+

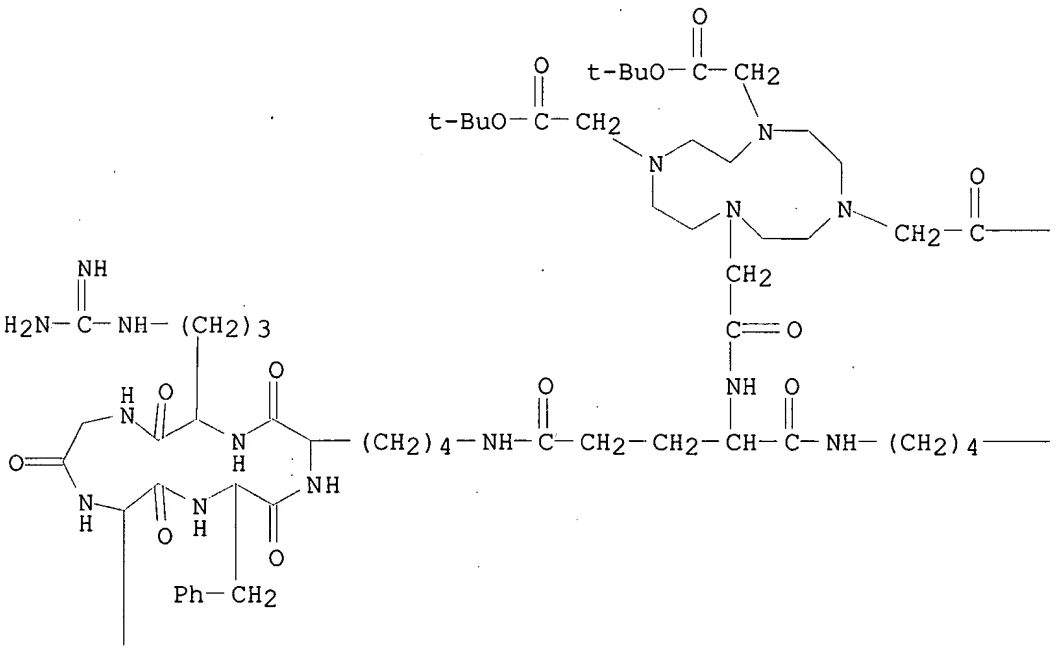
IT **250612-82-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

RN 250612-82-9 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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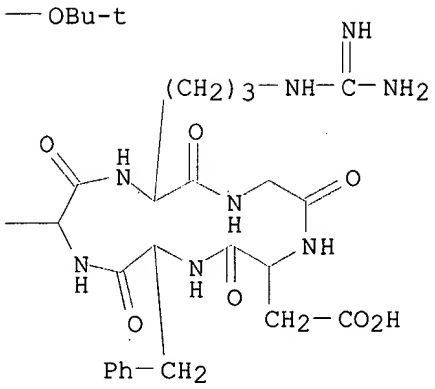

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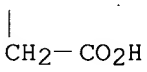
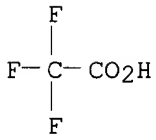


CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **10098-91-6**, y90, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radioisotope for use with peptide derivs. for the treatment of cancer in combination therapy)
RN 10098-91-6 HCAPLUS
CN Yttrium, isotope of mass 90 (8CI, 9CI) (CA INDEX NAME)

^{90}Y

L62 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:595337 HCAPLUS
DN 137:140780
TI Simultaneous imaging of cardiac perfusion and a vitronectin receptor

targeted imaging agent
IN **Carpenter, Alan P.**
PA USA
SO U.S. Pat. Appl. Publ., 86 pp.
CODEN: USXXCO
DT Patent
LA English
IC A61M036-14; A61K051-00
NCL 424001690
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 8, 63, 78
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2002106325	A1	20020808	US 2001-995388	20011127
PRAI PH 2000-7201	A	20001127		

OS MARPAT 137:140780
AB The invention describes a method of concurrent imaging in a mammal comprising: (a) administering a vitronectin receptor targeted imaging agent and a perfusion imaging agent, (b) concurrently detecting the vitronectin target imaging agent bound at the vitronectin receptor and the perfusion imaging agent, and (c) forming an image from the detection of the vitronectin receptor targeted imaging agent and the perfusion imaging agent. Compds. claimed include those of formula (Q)d-Ln-Ch, where Q is a peptide, d is 1-10, Ln is a linking group, and Ch is a metal bonding unit. Thus, cyclo[Arg-Gly-Asp-D-Tyr[N-[2-[[[5-(carbonyl)-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid]-3-aminopropyl]-Val] was prepd. and applied to the synthesis of complex 99mTc(VnA)(tricine)(TPPTS), where VnA represents the vitronectin receptor antagonist and TPPTS is P(m-C6H4SO3Na)3.
ST peptide radiopharmaceutical prepn cardiac perfusion vitronectin receptor imaging agent
IT Perfusion
(heart; prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT Heart
(perfusion; prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT Angiogenesis
Imaging agents
Radiopharmaceuticals
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT Vitronectin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT Peptides, preparation
RL: DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT Imaging
(tumor; prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
IT 288-88-0DP, 1H-1,2,4-Triazole, technetium-99m cyclopeptide tricine complexes 5704-04-1DP, Tricine, technetium-99m cyclopeptide triazole complexes 14133-76-7DP, cyclopeptide tricine triazole complexes, preparation
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

IT 250611-73-5P 250611-75-7P 250611-77-9P 250611-79-1P 250611-81-5P
250611-83-7P 250611-85-9P 250611-87-1P 250611-89-3P 250611-91-7P
250611-93-9P 250611-95-1P 250611-97-3P 250611-99-5P 250612-01-2P
250612-03-4P 250612-05-6P **250612-07-8P** 250612-08-9P
250612-09-0P 250612-11-4P
RL: DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 63-89-8P 7091-44-3P 250611-72-4DP, technetium-99m tricine triazole complex 250612-23-8DP, technetium-99m tricine triazole complex
250612-24-9P 250612-25-0P 250612-26-1P 250612-27-2P 250614-19-8P
250614-20-1P 250614-21-2P 250614-22-3P 250614-23-4P 250614-24-5P
250614-25-6P 250614-26-7P 250614-27-8P 250614-28-9P 250614-29-0P
250614-30-3P 250614-31-4P 250614-32-5P 250614-33-6P 250614-34-7P
250614-35-8P 250614-36-9P 250614-37-0P **250614-38-1P**
250614-39-2P **250614-40-5P** 250614-41-6P 250614-42-7P
250614-43-8P 250614-44-9P 250614-45-0P 250614-46-1P 250614-47-2P
250614-48-3P 250614-49-4P 250614-50-7P 250614-51-8P 250614-52-9P
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250614-58-5P 250614-59-6P 443125-64-2P 443125-65-3P 443125-66-4P
443125-67-5P 443125-68-6P 443125-69-7P 443125-71-1P
RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 13966-01-3, biological studies 80529-93-7, Gadopentetic acid
109581-73-9, Technetium Tc 99m sestamibi 120066-54-8, Gadoteridol
127455-27-0, Technetium-99 tetrofosmin 131410-48-5, Gadodiamide
131608-78-1, 99MTcN-NOET 142481-95-6, Technetium Tc 99m furifosmin
193901-90-5, Gadofosveset trisodium
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 67-43-6, Diethylenetriaminepentaacetic acid 108-30-5, Succinic anhydride, reactions 288-88-0, 1H-1,2,4-Triazole 3674-06-4, Boc phe osu 5437-45-6, Benzyl bromoacetate 5704-04-1, Tricine 63995-70-0, Tppts 63995-75-5, Tppms 64018-22-0, Tppds 122555-91-3 186305-11-3 194920-62-2 250612-83-0D, resin-bound 250612-84-1D, resin-bound 250612-85-2 250612-87-4 250612-88-5D, resin-bound 250612-89-6D, resin-bound 250612-90-9D, resin-bound 250612-92-1D, resin-bound 250612-93-2D, resin-bound
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 137076-54-1P 192635-89-5P 246234-73-1P 250612-28-3P 250612-30-7P
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250612-71-6P 250612-72-7P 250612-74-9P 250612-75-0P 250612-77-2P
250612-78-3P 250612-80-7P **250612-82-9P** 250612-86-3P
250612-94-3P 250636-75-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT **250612-07-8P**
RL: DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT

(Reactant or reagent); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

RN 250612-07-8 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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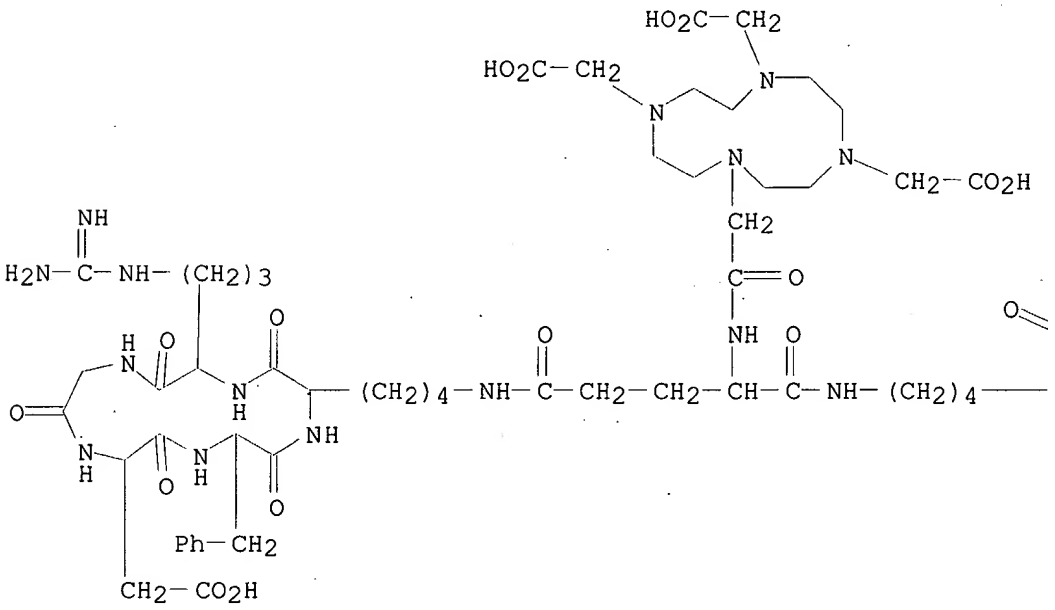
CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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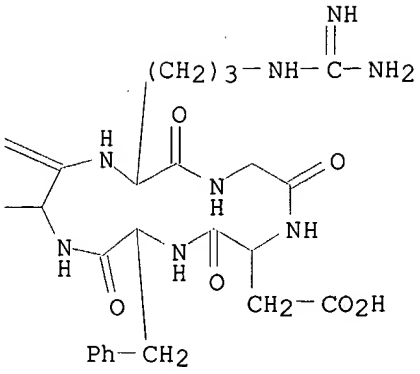

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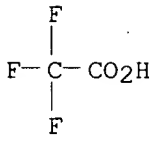
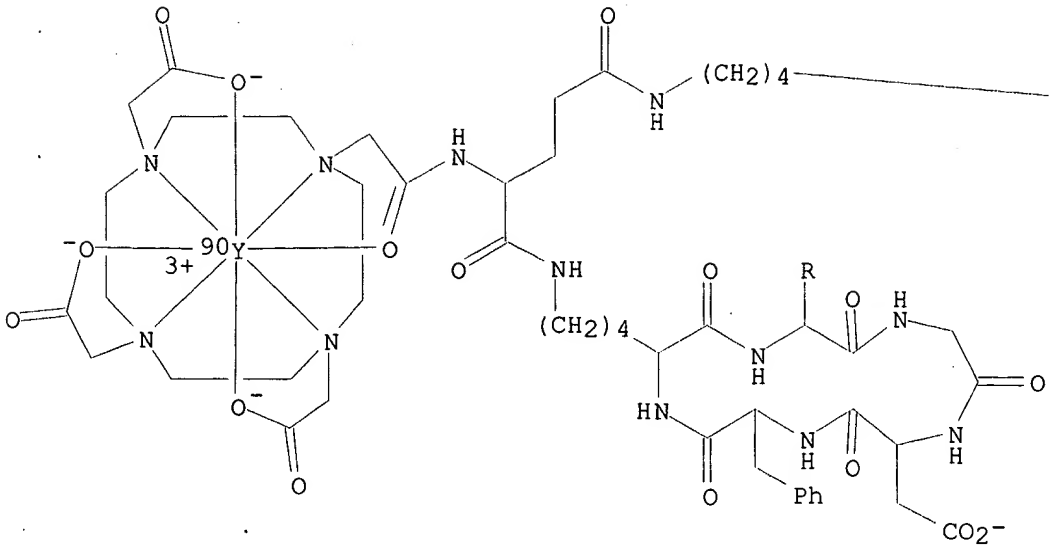


IT **250614-38-1P 250614-39-2P 250614-40-5P**
RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
RN 250614-38-1 HCAPLUS
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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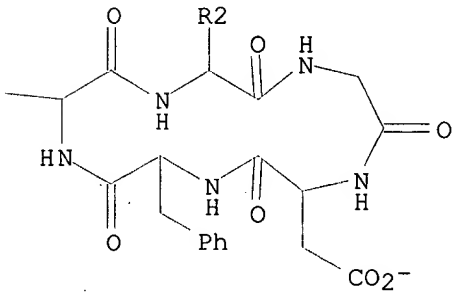

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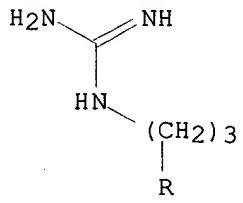

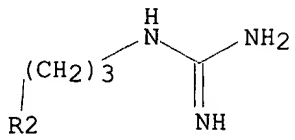

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RN 250614-39-2 HCAPLUS
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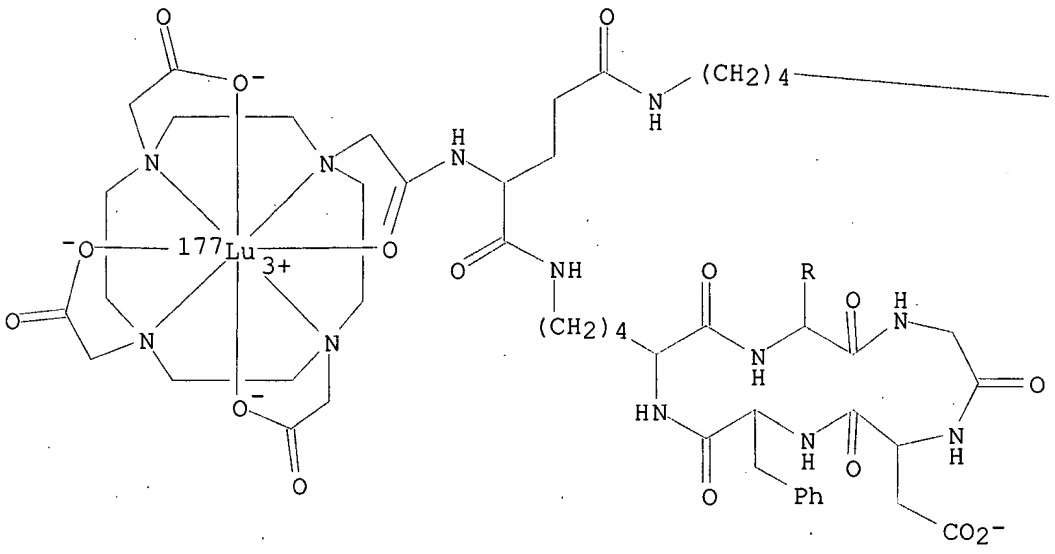
PAGE 1-A



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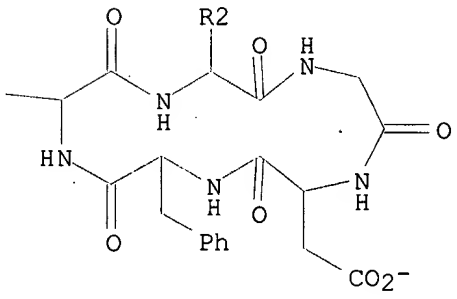

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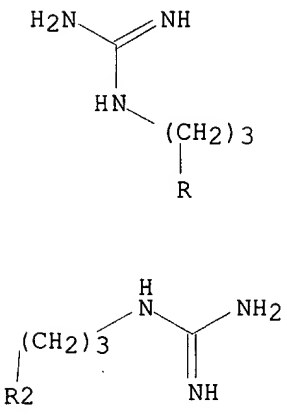

●2 H^+

RN 250614-40-5 HCAPLUS
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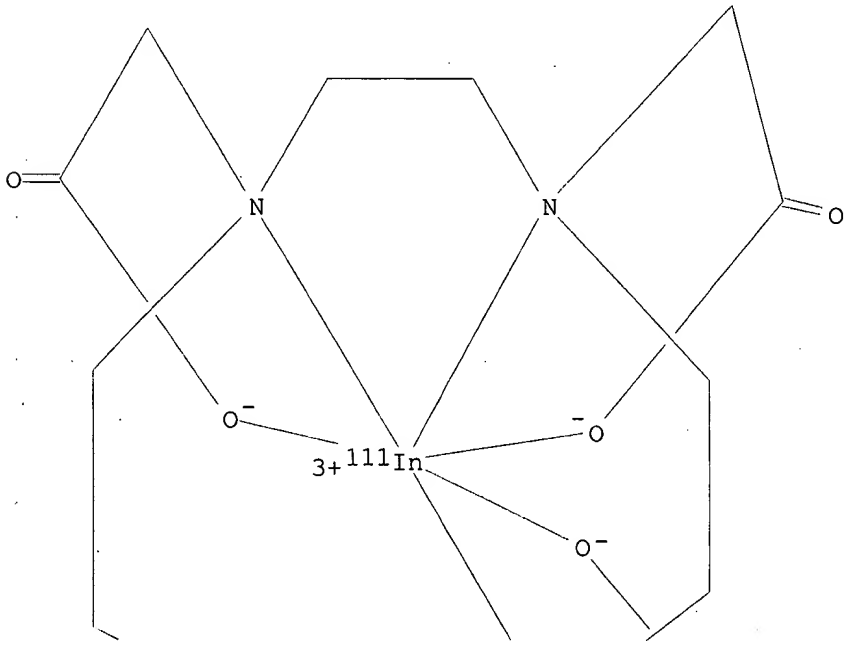
PAGE 1-A



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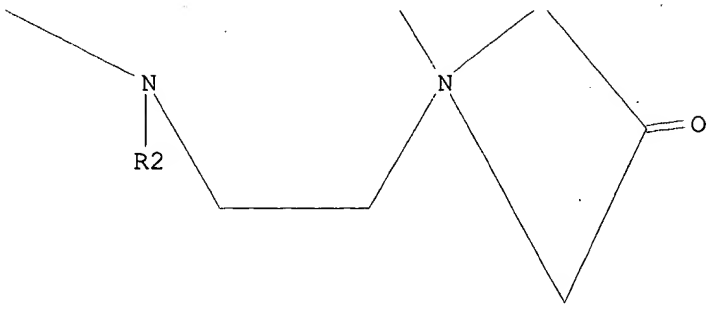
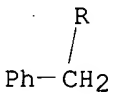
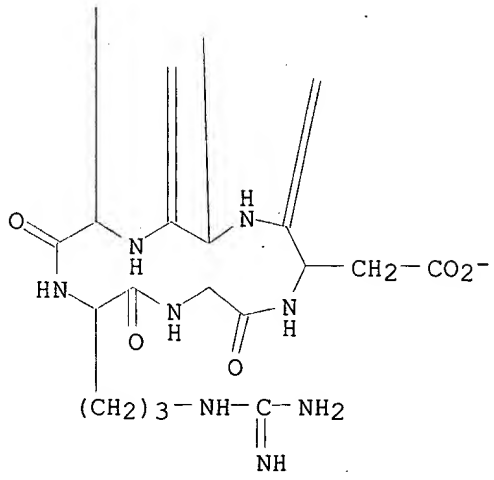




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

PAGE 4-A



2 H^+

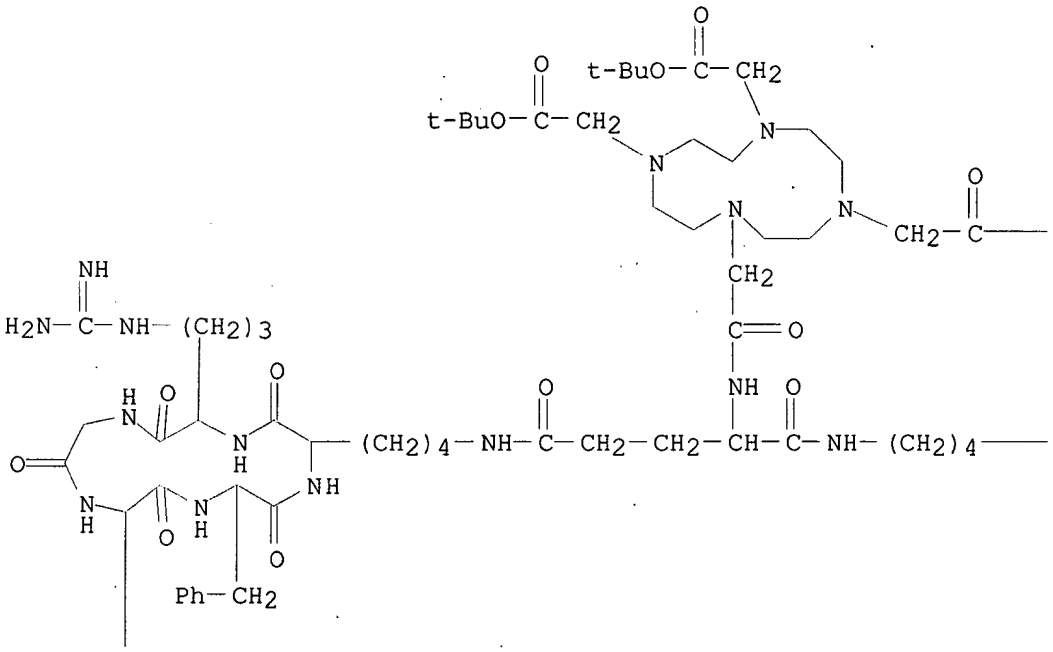
IT **250612-82-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

RN 250612-82-9 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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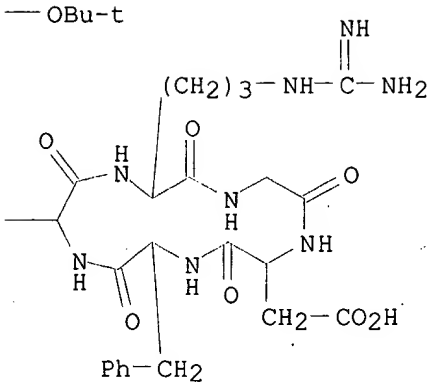

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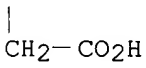
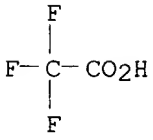


CM 2

CRN 76-05-1
CMF C2 H F3 O2



L62 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:539558 HCAPLUS
DN 137:109487
TI Simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent
IN **Carpenter, Alan P., Jr.**
PA **Bristol-Myers Squibb Medical Imaging, Inc., USA**
SO PCT Int. Appl., 272 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K051-00
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 8, 63, 78
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002055111	A2	20020718	WO 2001-US44155	20011126
	WO 2002055111	A3	20021010		

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI US 2000-253324P P 20001127

OS MARPAT 137:109487

AB The invention describes a method of concurrent imaging in a mammal comprising: (a) administering a vitronectin receptor targeted imaging agent and a perfusion imaging agent, (b) concurrently detecting the vitronectin target imaging agent bound at the vitronectin receptor and the perfusion imaging agent, and (c) forming an image from the detection of the vitronectin receptor targeted imaging agent and the perfusion imaging agent. Compds. claimed include those of formula (Q)d-Ln-Ch, where Q is a peptide, d is 1-10, Ln is a linking group, and Ch is a metal bonding unit. Thus, cyclo[Arg-Gly-Asp-D-Tyr[N-[2-[[[5-(carbonyl)-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid]-3-aminopropyl]-Val] was prepd. and applied to the synthesis of complex 99mTc(VnA)(tricine)(TPPTS), where VnA represents the vitronectin receptor antagonist and TPPTS is P(m-C6H4SO3Na)3.

ST peptide radiopharmaceutical prepn cardiac perfusion vitronectin receptor imaging agent

IT Perfusion
(heart; prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT Heart
(perfusion; prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT Angiogenesis
Imaging agents
Radiopharmaceuticals
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT Vitronectin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT Peptides, preparation
RL: DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT Imaging
(tumor; prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 288-88-0DP, 1H-1,2,4-Triazole, technetium-99m cyclopeptide tricine complexes 5704-04-1DP, Tricine, technetium-99m cyclopeptide triazole complexes 14133-76-7DP, cyclopeptide tricine triazole complexes, preparation
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

IT 250611-73-5P 250611-75-7P 250611-77-9P 250611-79-1P 250611-81-5P 250611-83-7P 250611-85-9P 250611-87-1P 250611-89-3P 250611-91-7P

250611-93-9P 250611-95-1P 250611-97-3P 250611-99-5P 250612-01-2P
250612-03-4P 250612-05-6P **250612-07-8P** 250612-08-9P
250612-09-0P 250612-11-4P
RL: DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 63-89-8P 7091-44-3P 250611-72-4DP, technetium-99m tricine triazole complex 250612-23-8DP, technetium-99m tricine triazole complex
250612-24-9P 250612-25-0P 250612-26-1P 250612-27-2P 250614-19-8P
250614-20-1P 250614-21-2P 250614-22-3P 250614-23-4P 250614-24-5P
250614-25-6P 250614-26-7P 250614-27-8P 250614-28-9P 250614-29-0P
250614-30-3P 250614-31-4P 250614-32-5P 250614-33-6P 250614-34-7P
250614-35-8P 250614-36-9P 250614-37-0P **250614-38-1P**
250614-39-2P 250614-40-5P 250614-41-6P 250614-42-7P
250614-43-8P 250614-44-9P 250614-45-0P 250614-46-1P 250614-47-2P
250614-48-3P 250614-49-4P 250614-50-7P 250614-51-8P 250614-52-9P
250614-53-0P 250614-54-1P 250614-55-2P 250614-56-3P 250614-57-4P
250614-58-5P 250614-59-6P 443125-64-2P 443125-65-3P 443125-66-4P
443125-67-5P 443125-68-6P 443125-69-7P 443125-71-1P
RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 13966-01-3, biological studies 80529-93-7, Gadopentetic acid 109581-73-9, Technetium Tc 99m sestamibi 120066-54-8, Gadoteridol 127455-27-0, Technetium-99 tetrofosmin 131410-48-5, Gadodiamide 131608-78-1, 99MTcN-NOET 142481-95-6, Technetium Tc 99m furifosmin 193901-90-5, Gadofosveset trisodium
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 67-43-6, Diethylenetriaminepentaacetic acid 108-30-5, Succinic anhydride, reactions 288-88-0, 1H-1,2,4-Triazole 3674-06-4, Boc phe osu 5437-45-6, Benzyl bromoacetate 5704-04-1, Tricine 63995-70-0, Tppts 63995-75-5, Tppms 64018-22-0, Tppds 122555-91-3 186305-11-3 194920-62-2 250612-83-0D, resin-bound 250612-84-1D, resin-bound 250612-85-2 250612-87-4 250612-88-5D, resin-bound 250612-89-6D, resin-bound 250612-90-9D, resin-bound 250612-92-1D, resin-bound 250612-93-2D, resin-bound
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT 137076-54-1P 192635-89-5P 246234-73-1P 250612-28-3P 250612-30-7P
250612-31-8P 250612-32-9P 250612-34-1P 250612-36-3P 250612-38-5P
250612-40-9P 250612-41-0P 250612-42-1P 250612-43-2P 250612-44-3P
250612-46-5P 250612-48-7P 250612-50-1P 250612-51-2P 250612-52-3P
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250612-62-5P 250612-64-7P 250612-65-8P 250612-67-0P 250612-69-2P
250612-71-6P 250612-72-7P 250612-74-9P 250612-75-0P 250612-77-2P
250612-78-3P 250612-80-7P **250612-82-9P** 250612-86-3P
250612-94-3P 250636-75-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

IT **250612-07-8P**
RL: DGN (Diagnostic use); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a

vitronectin receptor targeted imaging agent)

RN 250612-07-8 HCAPLUS

CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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CRN 250612-06-7

CMF C75 H113 N23 O23

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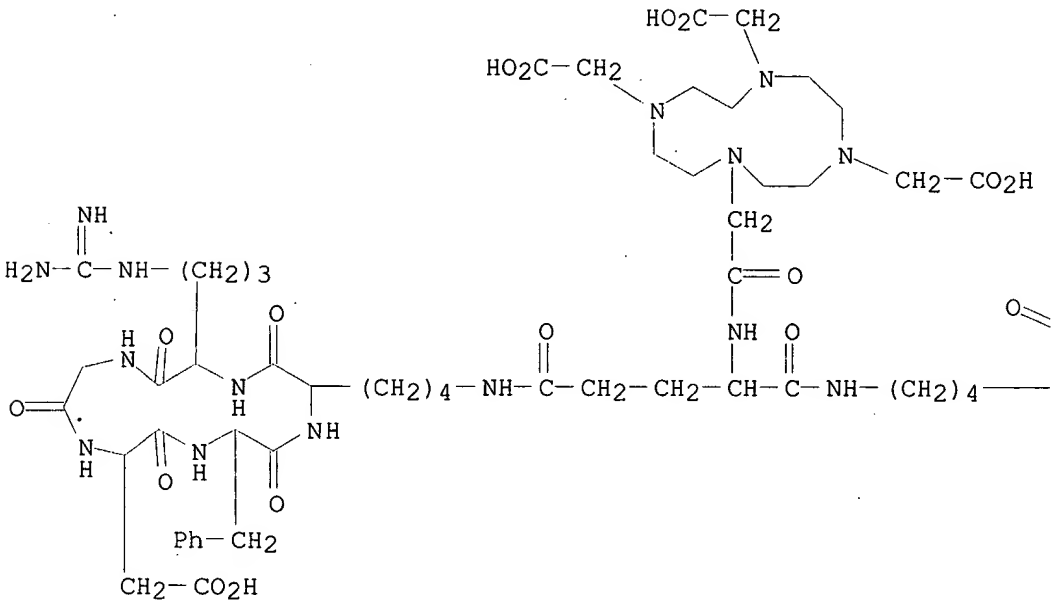

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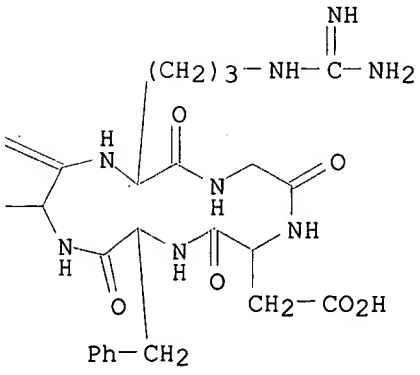

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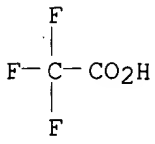
CRN 76-05-1
CMF C2 H F3 O2



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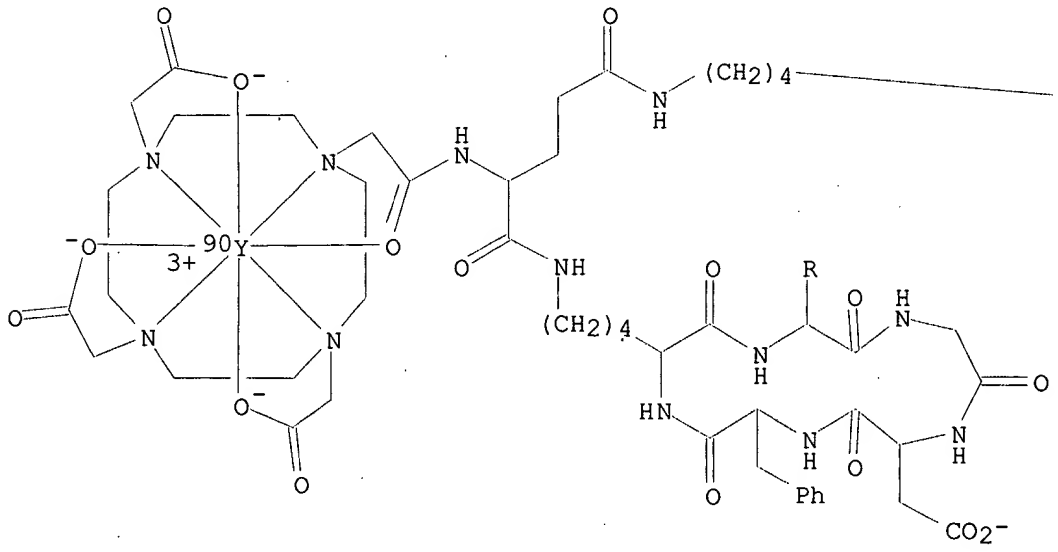
RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)
RN 250614-38-1 HCAPLUS
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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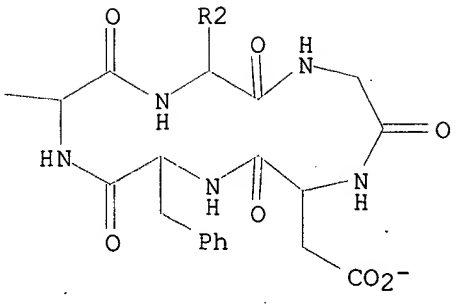

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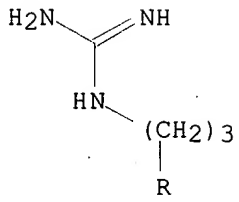
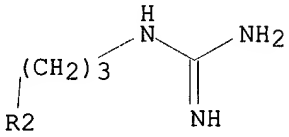
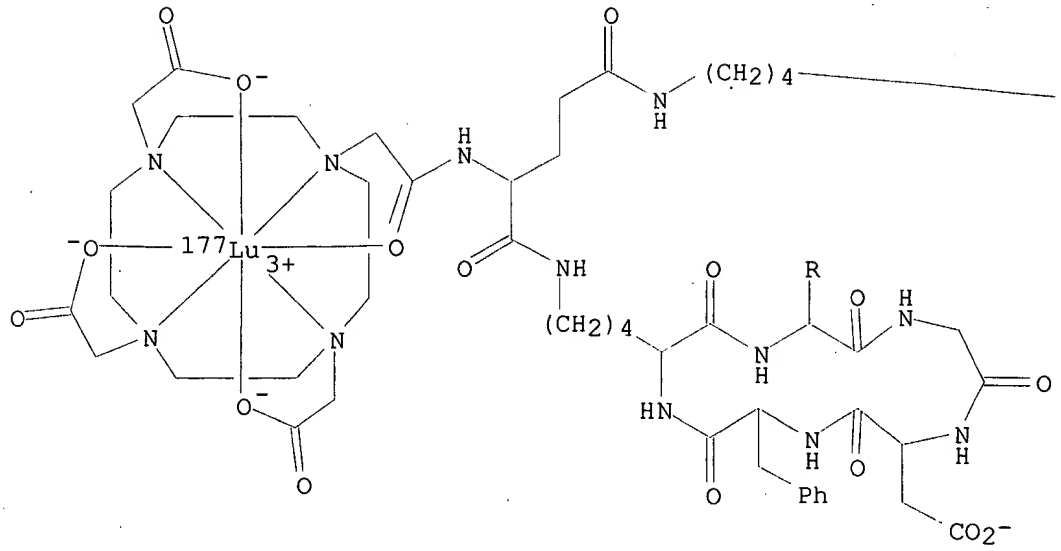




●2 H^+

RN 250614-39-2 HCAPLUS
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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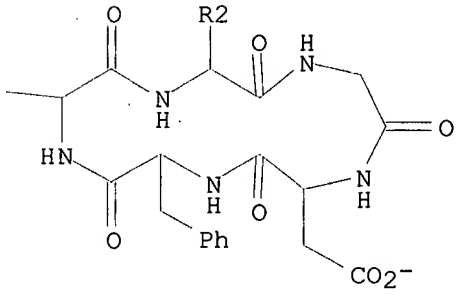

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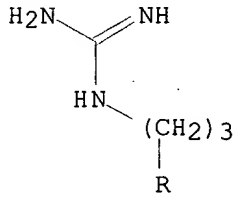
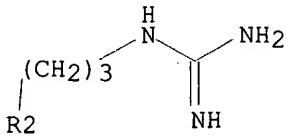
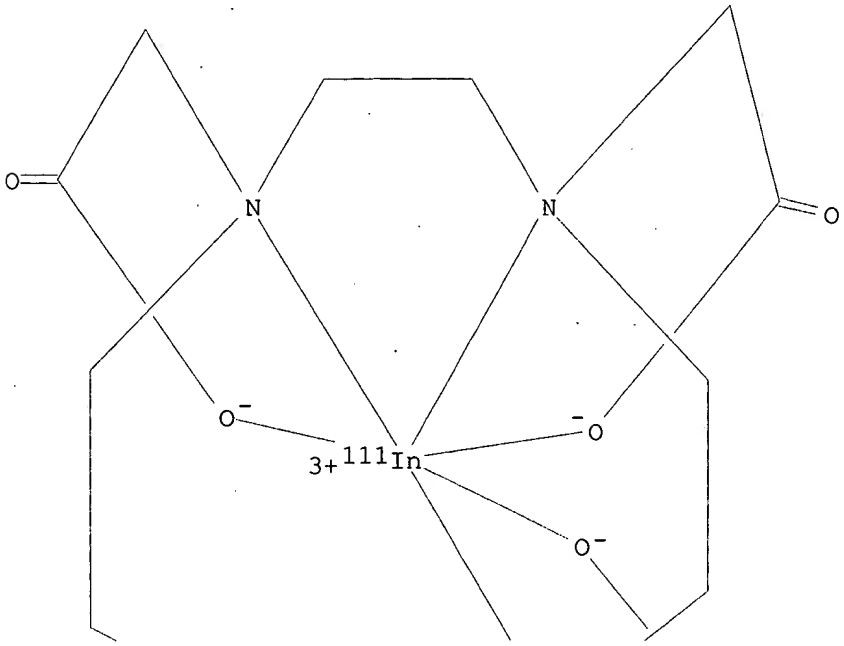




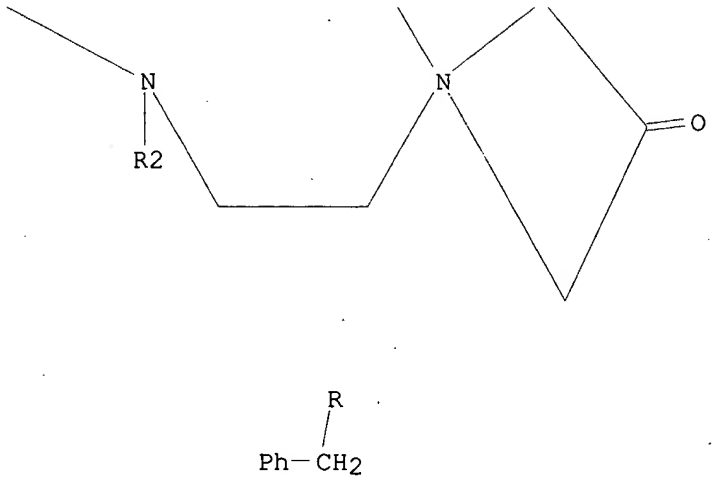
2 H^+

RN 250614-40-5 HCAPLUS
CN Indate(2-)-111In, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

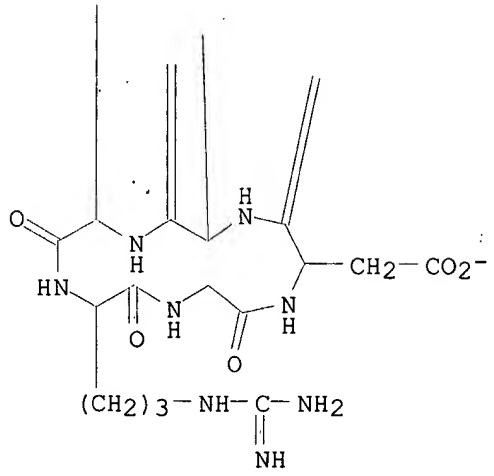
PAGE 1-A



PAGE 2-A



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



PAGE 4-A

2 H^+

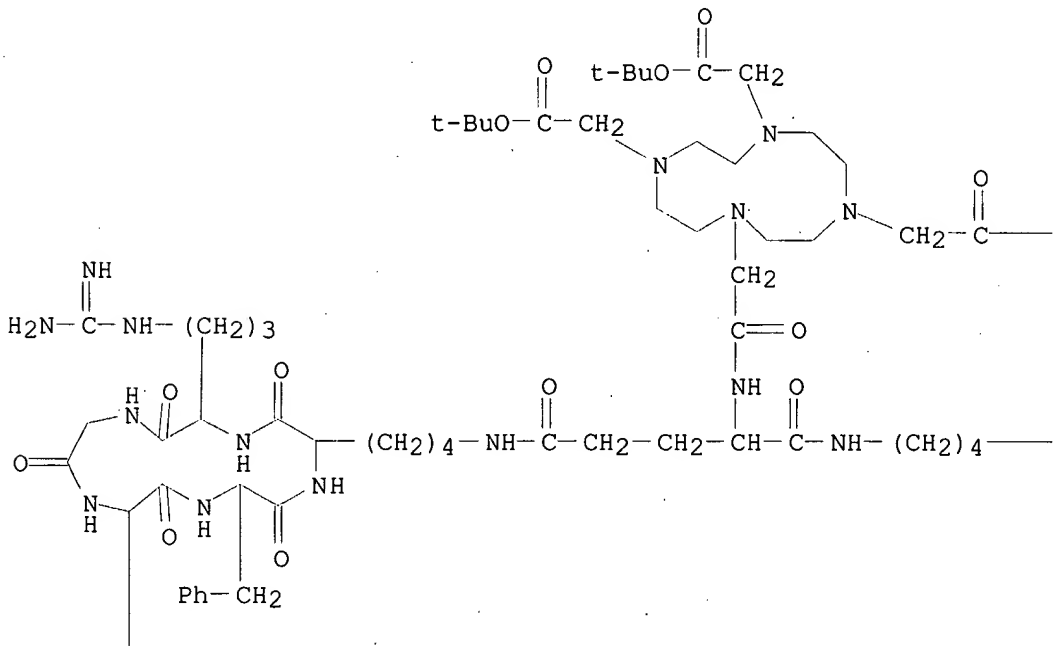
IT **250612-82-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptides and simultaneous imaging of cardiac perfusion and a vitronectin receptor targeted imaging agent)

RN 250612-82-9 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

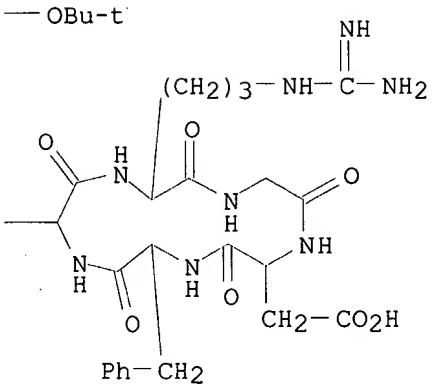
CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

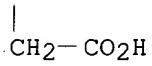
PAGE 1-A



PAGE 1-B

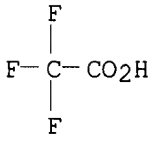


PAGE 2-A



CM 2

CRN 76-05-1
CMF C2 H F3 O2



L62 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 2002:51305 HCAPLUS
DN 136:123597
TI Preparation of stable radiopharmaceutical compositions useful for tumor therapy
IN **Liu, Shuang; Barrett, John A.; Carpenter, Alan P., Jr.**
PA **Dupont Pharmaceuticals Company, USA**
SO PCT Int. Appl., 127 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K051-04
ICS A61K051-08
CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 8, 34, 78

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002004030	A2	20020117	WO 2001-US21261	20010705
	WO 2002004030	A3	20030227		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2002122768	A1	20020905	US 2001-899629	20010705
	EP 1311301	A2	20030521	EP 2001-984147	20010705
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-216396P	P	20000706		
	WO 2001-US21261	W	20010705		

OS MARPAT 136:123597

AB The present invention provides stable radiopharmaceutical compns. including a therapeutic radionuclide and an effective stabilizing amt. of an arom. stabilizer (e.g., a polyhydroxylated arom. compd., an arom. amine, or a hydroxylated arom. amine), alone or in combination with other antioxidants or stabilizers, to inhibit radiolytic degrdn. of radiopharmaceuticals. The present invention also provides improved radiopharmaceutical formulations by the use of an arom. stabilizing agent (e.g., a polyhydroxylated arom. compd., an arom. amines, or a hydroxylated arom. amine), and/or low temp. storage. The present invention also provides processes for making stable radiopharmaceutical compns. The present invention also provides the use of the pharmaceutical compns. in medical therapy and/or medical diagnosis.

ST radiopharmaceutical stabilization gentisate hydroxybenzoate; sulfonatobenzeneamine ascorbate radiopharmaceutical stabilization; antioxidant hydroxybenzaldehyde radiopharmaceutical stabilization; radionuclide chelator biomol conjugate prepn stabilization

IT Carcinoma
(adenocarcinoma; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Uterus, neoplasm
(cervix; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Interferons
Interleukin 2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chemotherapeutic agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT Intestine, neoplasm
(colon; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Intestine, neoplasm
(colorectal; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Radionuclides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(complexes, radionuclides; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT Radiology
(diagnostic; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Angiogenesis

(disease assocd. with receptors in; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Epidermal growth factor receptors
Fibrinogen receptors
Growth factor receptors
Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Uterus, neoplasm
(endometrium; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Neuroglia
(glioma; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Selectins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ligands, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Antibodies
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monoclonal, labeled; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT Biliary tract
Bladder
Esophagus
Larynx
Mammary gland
Prostate gland
(neoplasm; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Nerve, neoplasm
(neuroblastoma; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Salivary gland
(parotid, cancer; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Peptides, biological studies
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)

IT Antitumor agents
Drug delivery systems
Imaging agents
Radiopharmaceuticals
Stabilizing agents
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT Ligands
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(selectin, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Lung, neoplasm
(small-cell carcinoma; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Carcinoma
(squamous cell; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Animal tissue
Atherosclerosis
Drug delivery systems

Heart, disease
Infection
Inflammation
Kidney, disease
Kidney, neoplasm
Liver, neoplasm
Lung, neoplasm
Melanoma
Organ, animal
Ovary, neoplasm
Pancreas, neoplasm
Radiosensitizers, biological
Stomach, neoplasm
Testis, neoplasm
Thyroid gland, neoplasm
Transplant rejection
Uterus, neoplasm
(stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Androgen receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Embolism
(thromboembolism; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha., chemotherapeutic agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.IIb.beta.3, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Integrins
Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.v.beta.3, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.v.beta.5, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.1.beta.1, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.4.beta.1, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Integrins
Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.5.beta.1, disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta., chemotherapeutic agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(.gamma., chemotherapeutic agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT 50-07-7, Mitomycin 57-22-7, Vincristine 57-83-0, Progesterone, biological studies 59-05-2, Methotrexate 125-84-8, Aminoglutethimide 147-94-4, Cytarabine 302-79-4, Tretinoin 434-07-1, Oxymetholone 488-41-5, Mitobronitol 566-48-3, Formestane 2363-58-8, Epitiostanol 3094-09-5, Doxifluridine 3778-73-2, Ifosfamide 4291-63-8, Cladribine 4533-39-5, Nitracrine 4759-48-2, Isotretinoin 6620-60-6, Proglumide 9014-02-2, Zinostatin 9034-40-6, Lhrf 9050-67-3, Sizofilan 10318-26-0, Mitolactol 10540-29-1, Tamoxifen 13311-84-7, Flutamide 13425-98-4, Improsulfan 14769-73-4, Levamisole 17902-23-7, Tegafur 18016-80-3, Lisuride 18883-66-4, Streptozocin 20830-81-3, Daunorubicin 21362-69-6, Mepitiostane 21416-67-1, Razoxane 22181-94-8, Butocin 23214-92-8, Doxorubicin 24279-91-2, Carboquone 29069-24-7, Prednimustine 29767-20-2, Teniposide 33419-42-0, Etoposide 39325-01-4, Picibanil 41575-94-4, Carboplatin 42471-28-3, Nimustine 51264-14-3, Amsacrine 53643-48-4, Vindesine 53910-25-1, Pentostatin 54350-48-0, Etretinate 55726-47-1, Enocitabine 58337-35-2, Elliptinium acetate 61422-45-5, Carmofur 62304-98-7, Thymalfasin 71486-22-1, Vinorelbine 74050-98-9, Ketanserin 81627-83-0, Colony stimulating factor-1 81840-15-5, Vesnarinone 83869-56-1, Colonystimulating factor-2 90357-06-5, Bicalutamide 92118-27-9, Fotemustine 95058-81-4, Gemcitabine 95734-82-0, Nedaplatin 98631-95-9, Sobuzoxane 102676-47-1, Fadrozole 112809-51-5, Letrozole 112887-68-0, Raltitrexed 120287-85-6, Cetrorelix 173146-27-5, Denileukin diftitox
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chemotherapeutic agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT 80449-02-1, Tyrosine kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(disease assocd. with; stabilized radiopharmaceutical compns. for use in medical therapy and/or medical diagnosis)

IT 108-68-9 769-39-1 2419-94-5 2969-81-5 6066-82-6 18807-71-1 114559-25-0 137076-54-1 208580-27-2 277316-35-5 277316-57-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)

IT 40324-66-1P 57932-18-0P 161552-03-0P 246234-73-1P 250612-43-2P 250612-45-4P 250612-48-7P **250612-82-9P** 277315-71-6P 277315-82-9P 277315-89-6P 277315-90-9P 277316-24-2P 277316-27-5P 277316-28-6P 277316-29-7P 277316-30-0P 277316-31-1P 277316-40-2P 277316-41-3P 277316-44-6P 277316-45-7P 277316-58-2P 389885-48-7DP, oxime resin-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)

IT **250612-07-8P** 277315-68-1P 277315-72-7P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)

IT **250614-38-1P** 278173-02-7P 278173-08-3P 390798-27-3P
RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT 10043-66-0D, Iodine 131, complexes, biological studies **10098-91-6D**, 90Y, complexes, biological studies 13967-65-2D, Holmium 166, complexes, biological studies 13981-25-4D, Copper 64, complexes, biological studies 13981-27-6D, Zirconium 89, complexes, biological studies 13981-59-4D, Tin 117, complexes, biological studies 13982-06-4D, Copper 60, complexes, biological studies 14119-09-6D,

Gallium 67, complexes, biological studies 14133-76-7D, 99Tc, complexes, biological studies 14158-31-7D, Iodine 125, complexes, biological studies 14265-75-9D, 177Lu, complexes, biological studies 14276-53-0D, Copper 62, complexes, biological studies 14378-26-8D, Rhenium 188, complexes, biological studies 14391-96-9D, Scandium 47, complexes, biological studies 14596-37-3D, Phosphorus 32, complexes, biological studies 14687-25-3D, Lead 203, complexes, biological studies 14913-89-4D, complexes, biological studies 14981-64-7D, Palladium 109, complexes, biological studies 14998-63-1D, Rhenium 186, complexes, biological studies 15715-08-9D, Iodine 123, complexes, biological studies 15750-15-9D, Indium 111, complexes, biological studies 15755-39-2D, Astatine 211, complexes, biological studies 15757-14-9D, Gallium 68, complexes, biological studies 15757-86-5D, Copper 67, complexes, biological studies 15758-35-7D, Ruthenium 97, complexes, biological studies 15765-31-8D, Promethium 149, complexes, biological studies 15766-00-4D, Samarium 153, complexes, biological studies
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT 16434-14-3, Lutetium-177 trichloride 39271-65-3, Yttrium-90 trichloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT 22668-01-5 27314-97-2 70132-50-2 88876-88-4 104958-90-9 108001-60-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radiosensitizer agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

IT 50-81-7, Ascorbic acid, biological studies 51-85-4, Cystamine 57-55-6, Propylene glycol, biological studies 59-67-6, Nicotinic acid, biological studies 87-89-8, Inositol 89-57-6, 5-Amino-2-hydroxybenzoic acid 98-92-0, Nicotinamide 100-51-6, Benzyl alcohol, biological studies 134-03-2, Sodium ascorbate 137-51-9 149-91-7, biological studies 150-13-0, p-Aminobenzoic acid **490-79-9, Gentisic acid** 495-08-9, Gentisyl alcohol 610-02-6 2374-03-0 4955-90-2, Sodium gentisate 9004-54-0, Dextran, biological studies 13677-79-7 389885-49-8
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilizing agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)

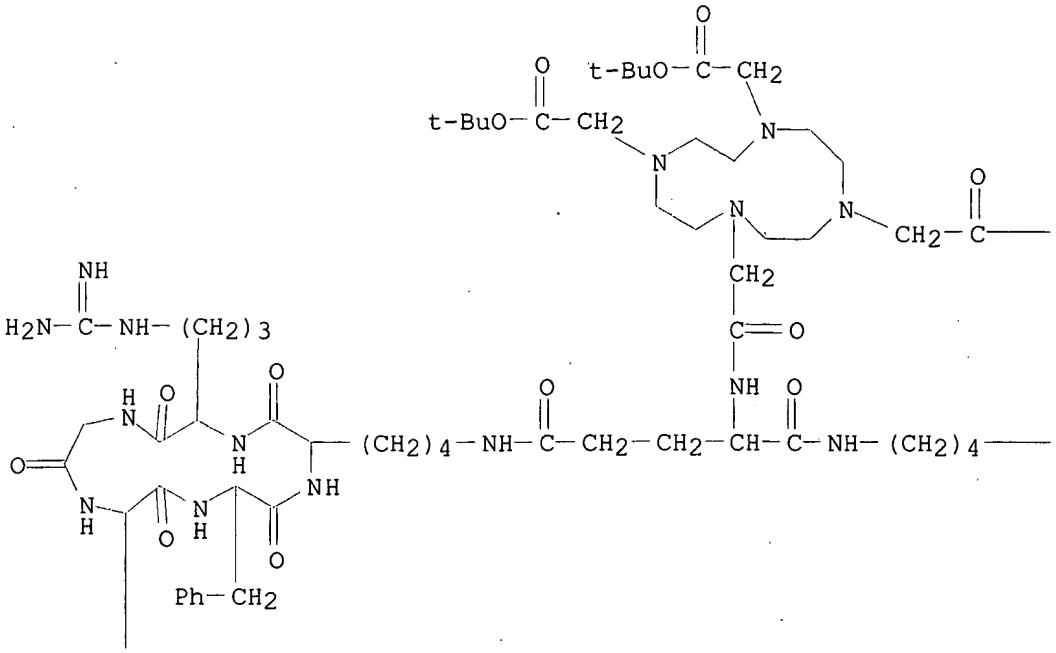
IT **250612-82-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)

RN 250612-82-9 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

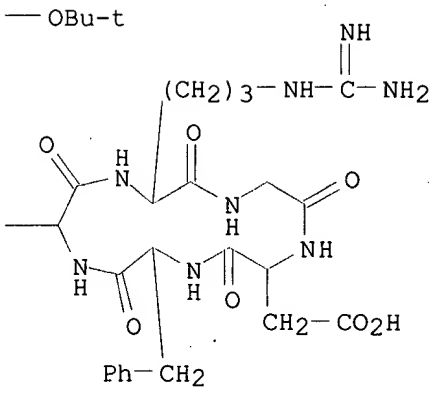
CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



PAGE 1-B



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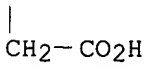
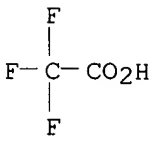


CM 2

CRN 76-05-1
CMF C2 H F3 O2

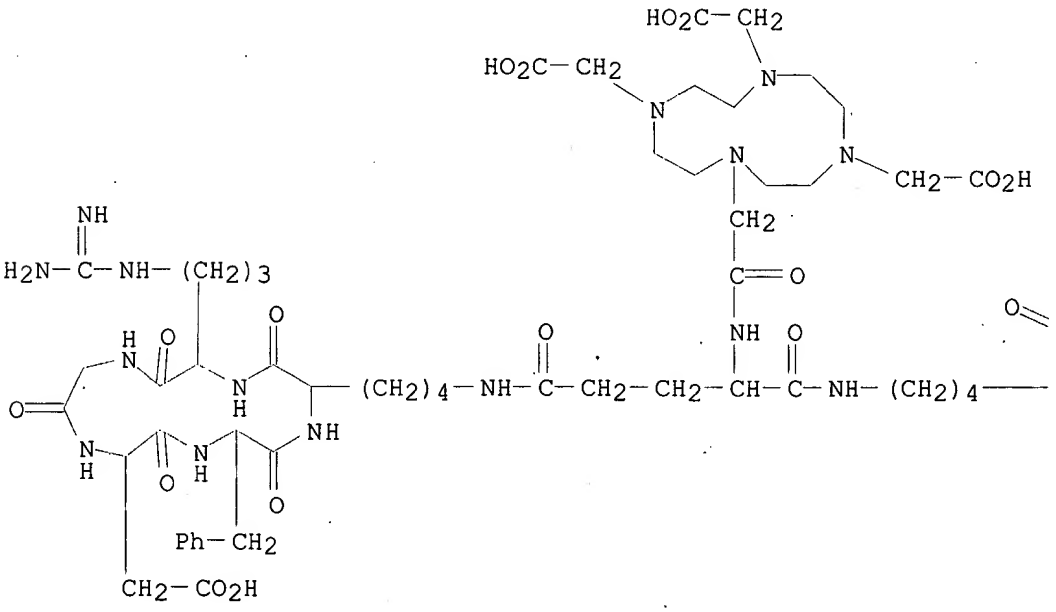


IT **250612-07-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of chelator-optional linker-biomol. conjugates for use in stable radiopharmaceutical compns.)
RN 250612-07-8 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

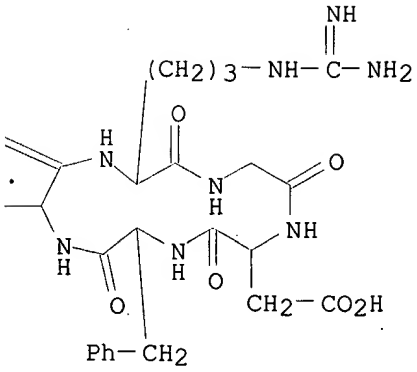
CM 1

CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A

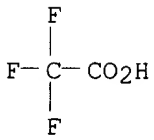


PAGE 1-B



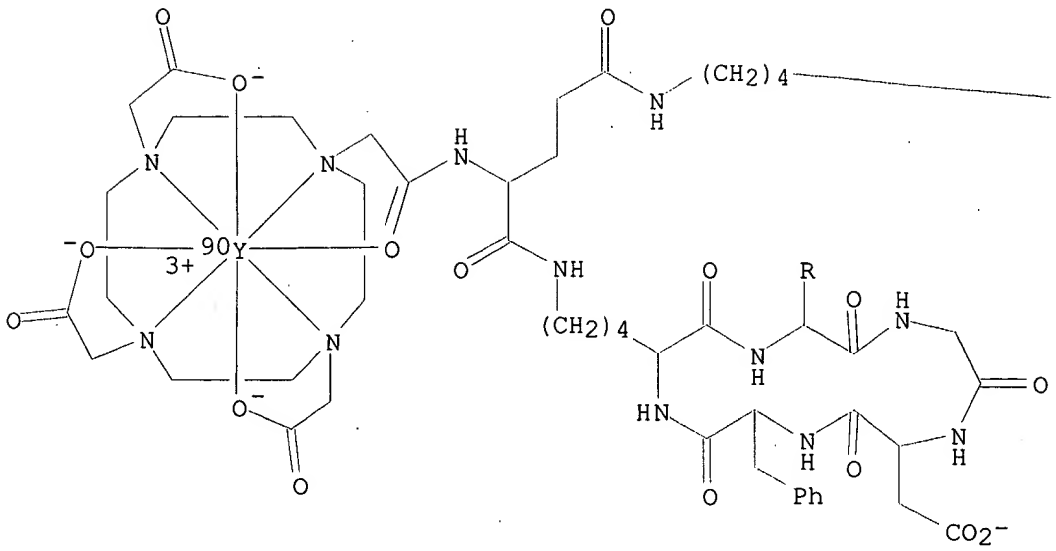
CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **250614-38-1P**
RL: DGN (Diagnostic use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)
RN 250614-38-1 HCAPLUS
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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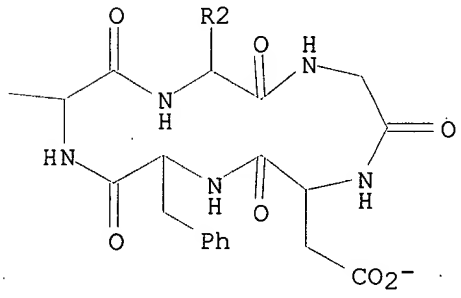

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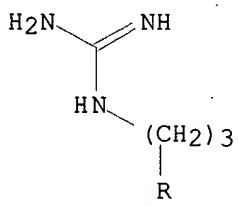
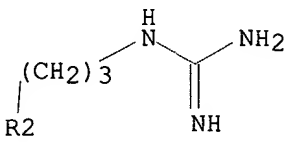


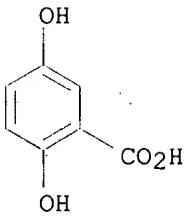


●2 H^+

IT **10098-91-6D**, 90Y, complexes, biological studies
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of stable radiopharmaceutical compns. useful for tumor therapy)
RN 10098-91-6 HCAPLUS
CN Yttrium, isotope of mass 90 (8CI, 9CI) (CA INDEX NAME)

^{90}Y

IT **490-79-9, Gentisic acid**
RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilizing agent; prepn. of stable radiopharmaceutical compns. useful for tumor therapy)
RN 490-79-9 HCAPLUS
CN Benzoic acid, 2,5-dihydroxy- (9CI) (CA INDEX NAME)



L62 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:935452 HCAPLUS
DN 136:70083
TI Pharmaceuticals for the imaging of angiogenic disorders for use in combination therapy
IN Rajopadhye, Milind; Edwards, D. Scott; **Barrett, John A.**; **Carpenter, Alan P., Jr.**; Heminway, Stuart J.; **Liu, Shuang**; Singh, Prahlad
PA **Dupont Pharmaceuticals Company, USA**
SO PCT Int. Appl., 306 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K051-08
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 8, 63, 78
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2001097860	A2	20011227	WO 2001-US20108	20010621
WO 2001097860	A3	20030227		

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1311302	A2	20030521	EP 2001-946697	20010621

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PRAI US 2000-213206P P 20000621
WO 2001-US20108 W 20010621

OS MARPAT 136:70083

AB Compds. (Q)d-Ln-Ch (Q is a peptide, d = 1-10, Ln is a linking group, Ch is a metal-bonding unit) were prepd. for use in the diagnosis and treatment of cancer in combination therapy in a patient. The present invention also provides novel compds. useful for the treatment of rheumatoid arthritis (no data). Thus, cyclo{Arg-Gly-Asp-D-Tyr(N-[2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid]-3-aminopropyl)-Val} was prepd. by acylation of cyclo{Arg-Gly-Asp-D-Tyr(3-aminopropyl)-Val} with 2-[[[5-[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid monosodium salt and converted into radiopharmaceutical 99mTc(VnA)(tricine)(phosphine), where VnA represents the vitronectin receptor antagonist.

ST cyclic peptide radiolabeled prepn imaging angiogenic disorder; radiopharmaceutical cyclic peptide prepn vitronectin receptor antagonist anticancer agent

IT Imaging agents
(NMR contrast; prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Interferons
Interleukin 2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer agents as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT Peptides, preparation
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(cyclic; prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Photosensitizers (pharmaceutical)
(photosensitizers as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT Angiogenesis
Antitumor agents
Radiopharmaceuticals
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Vitronectin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT Radiosensitizers, biological
(radiosensitizers as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT Neoplasm
Rheumatoid arthritis
(treatment of; prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 50-07-7, Mitomycin 57-22-7, Vincristine 57-83-0, Progesterone, biological studies 59-05-2, Methotrexate 125-84-8, Aminoglutethimide 147-94-4, Cytarabine 302-79-4, Tretinoin 434-07-1, Oxymetholone 488-41-5, Mitobronitol 566-48-3, Formestane 2363-58-8, Epitiostanol 3094-09-5, Doxifluridine 3778-73-2, Ifosfamide 4291-63-8, Cladribine 4533-39-5, Nitracrine 4759-48-2, Isotretinoin 6620-60-6, Proglumide 9014-02-2, Zinostatin 9034-40-6, Lhrf 9050-67-3, Sizofilan 10318-26-0, Mitolactol 10540-29-1, Tamoxifen 13311-84-7, Flutamide 13425-98-4, Improsulfan 14769-73-4, Levamisole 17902-23-7, Tegafur 18016-80-3, Lisuride 18883-66-4, Streptozocin 20830-81-3, Daunorubicin 21362-69-6, Mepitiostane 21416-67-1, Razoxane 22181-94-8, Butocin

23214-92-8, Doxorubicin 24279-91-2, Carboquone 29069-24-7, Prednimustine 29767-20-2, Teniposide 33419-42-0, Etoposide 39325-01-4, Picibanil 41575-94-4, Carboplatin 42471-28-3, Nimustine 51264-14-3, Amsacrine 53643-48-4, Vindesine 53910-25-1, Pentostatin 54350-48-0, Etretinate 55726-47-1, Enocitabine 58337-35-2, Elliptinium acetate 61422-45-5, Carmofur 62304-98-7, Thymalfasin 71486-22-1, Vinorelbine 74050-98-9, Ketanserin 81627-83-0, Colony stimulating factor-1 81840-15-5, Vesnarinone 83869-56-1, Colony stimulating factor-2 90357-06-5, Bicalutamide 92118-27-9, Fotemustine 95058-81-4, Gemcitabine 95734-82-0, Nedaplatin 98631-95-9, Sobuzoxane 102676-47-1, Fadrozole 104958-90-9 108001-60-1 112809-51-5, Letrozole 112887-68-0, Raltitrexed 120287-85-6, Cetrorelix 173146-27-5, Denileukin diftitox
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anticancer agents as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT 22668-01-5 27314-97-2, 3-Amino-1,2,4-benzotriazine-1,4-dioxide 68335-15-9, Photofrin 70132-50-2 88876-88-4 220264-81-3 220264-83-5 381733-54-6 381733-55-7 381733-56-8 381733-57-9 381733-58-0 381733-59-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(photosensitizers as adjuvants in the treatment of cancer with peptide derivs. and their radioactive metal complexes)

IT 202930-91-4P 250611-72-4P 250611-73-5P 250611-74-6P 250611-75-7P 250611-76-8P 250611-77-9P 250611-78-0P 250611-79-1P 250611-80-4P 250611-81-5P 250611-82-6P 250611-83-7P 250611-84-8P 250611-85-9P 250611-86-0P 250611-87-1P 250611-88-2P 250611-89-3P 250611-90-6P 250611-91-7P 250611-92-8P 250611-93-9P 250611-94-0P 250611-95-1P 250611-96-2P 250611-97-3P 250611-98-4P 250611-99-5P 250612-00-1P 250612-01-2P 250612-02-3P 250612-03-4P 250612-04-5P 250612-05-6P **250612-06-7P 250612-07-8P** 250612-08-9P 250612-09-0P 250612-10-3P 250612-11-4P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 250611-72-4DP, technetium-99m tricine triazole complex 250612-12-5P 250612-13-6P 250612-14-7P 250612-15-8P 250612-16-9P 250612-17-0P 250612-18-1P 250612-19-2P 250612-20-5P 250612-21-6P 250612-22-7P 250612-24-9P 250612-25-0P 250612-26-1P 250614-19-8P 250614-20-1P 250614-21-2P 250614-22-3P 250614-23-4P 250614-24-5P 250614-25-6P 250614-26-7P 250614-27-8P 250614-28-9P 250614-29-0P 250614-30-3P 250614-31-4P 250614-32-5P 250614-33-6P 250614-34-7P 250614-35-8P 250614-36-9P 250614-37-0P **250614-38-1P 250614-39-2P 250614-40-5P** 250614-41-6P 250614-42-7P 250614-43-8P 250614-44-9P 250614-45-0P 250614-46-1P 250614-47-2P 250614-48-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 108-30-5, reactions 288-88-0, 1H-1,2,4-Triazole 5437-45-6, Benzyl bromoacetate 5704-04-1, Tricine 23911-26-4, Diethylenetriaminepentaacetic dianhydride 63995-70-0, Tppts 63995-75-5, TPPMS 64018-22-0, TPPDS 122555-91-3 161552-03-0 180468-25-1 186305-11-3 194920-62-2 250612-83-0D, resin-bound 250612-84-1D, resin-bound 250612-85-2D, resin-bound 250612-86-3 250612-87-4 250612-88-5D, resin-bound 250612-89-6D, resin-bound 250612-90-9D, resin-bound 250612-92-1D, resin-bound 250612-93-2D, resin-bound 250612-94-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and

the treatment of cancer in combination therapy)

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250612-31-8P 250612-32-9P 250612-34-1P 250612-36-3P 250612-38-5P
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250612-46-5P 250612-48-7P 250612-50-1P 250612-51-2P 250612-52-3P
250612-54-5P 250612-56-7P 250612-57-8P 250612-59-0P 250612-61-4P
250612-62-5P 250612-64-7P 250612-65-8P 250612-67-0P 250612-69-2P
250612-71-6P 250612-72-7P 250612-74-9P 250612-75-0P 250612-77-2P
250612-78-3P 250612-80-7P **250612-82-9P** 250636-75-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 22541-90-8, reactions
RL: RGT (Reagent); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 250614-59-6P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

IT 63-89-8 7091-44-3 250612-27-2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

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RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radioisotope for use with peptide derivs. for the treatment of cancer in combination therapy)

IT **250612-06-7P 250612-07-8P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

RN 250612-06-7 HCAPLUS

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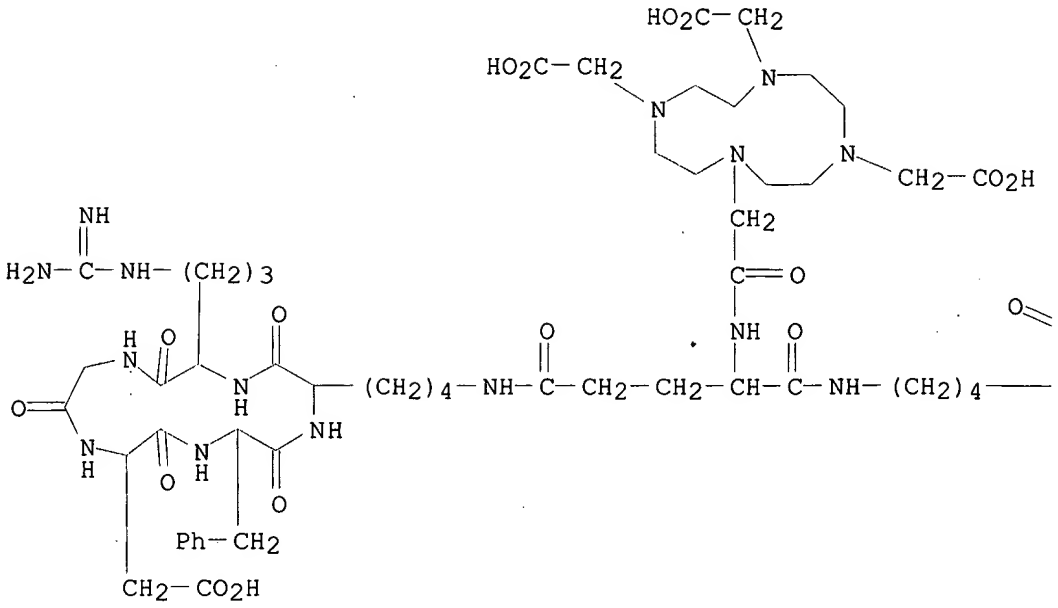
PAGE 1-A



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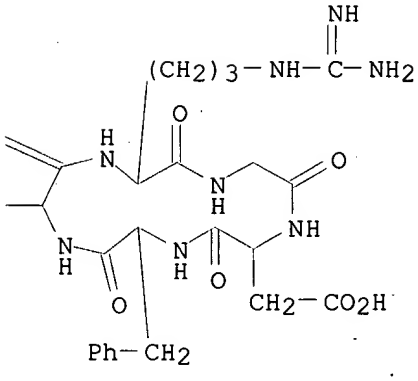

RN 250612-07-8 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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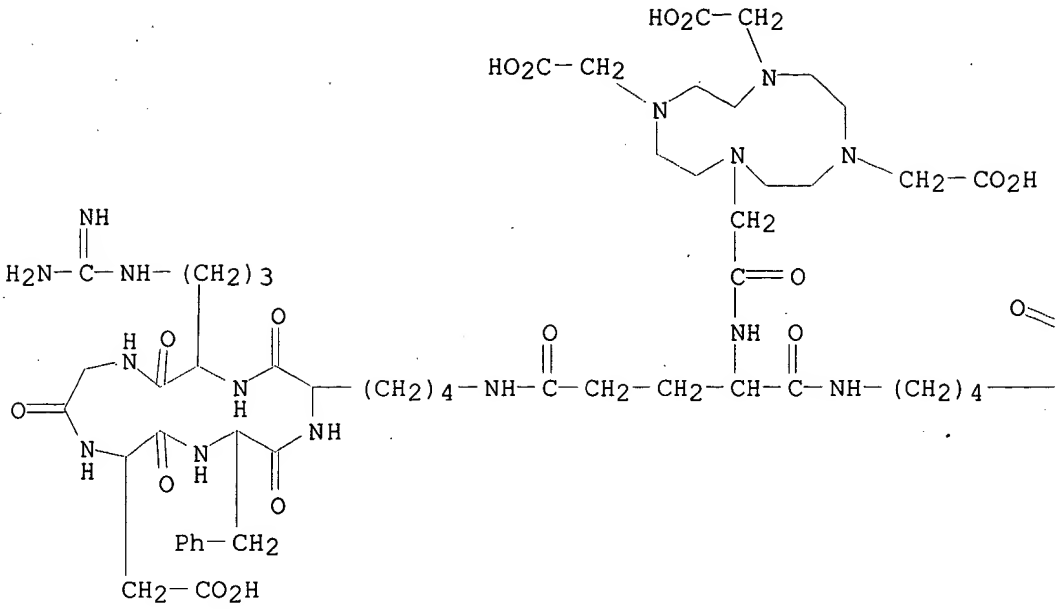
CRN 250612-06-7
CMF C75 H113 N23 O23

PAGE 1-A



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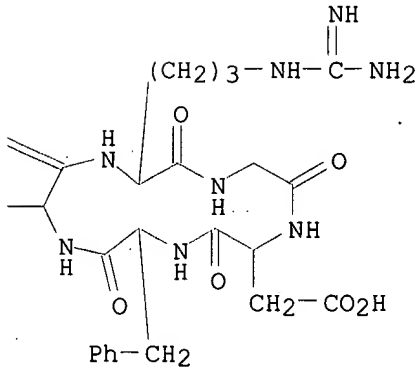

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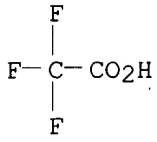

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(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)
RN 250614-38-1 HCAPLUS
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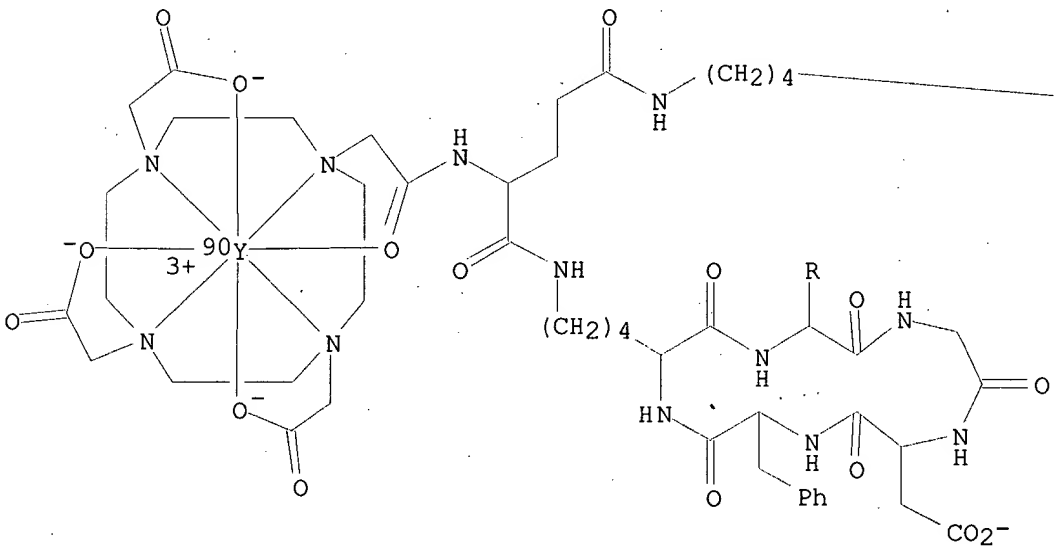

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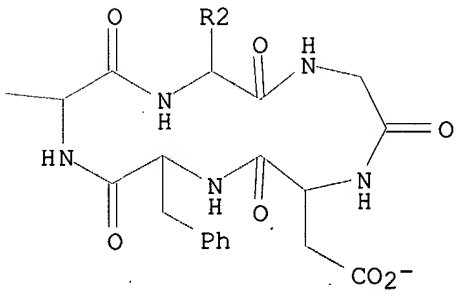

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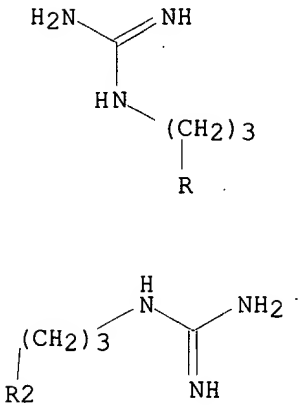

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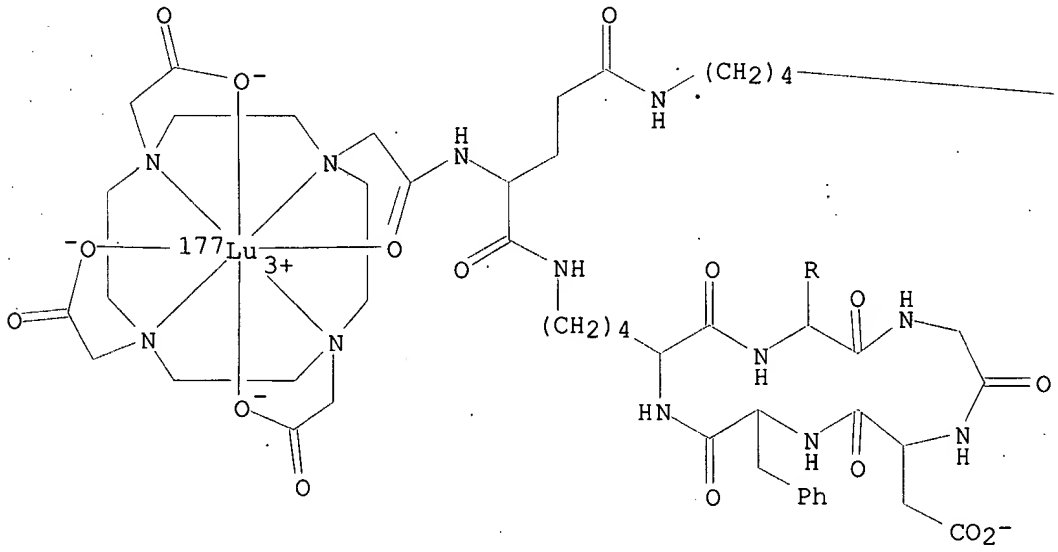
PAGE 1-A



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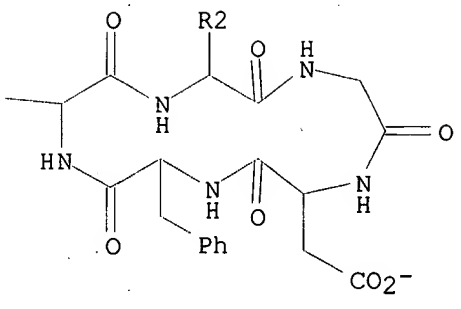

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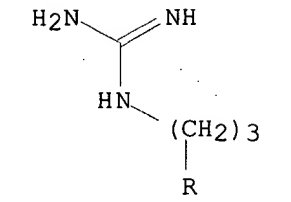

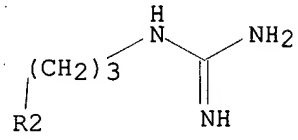

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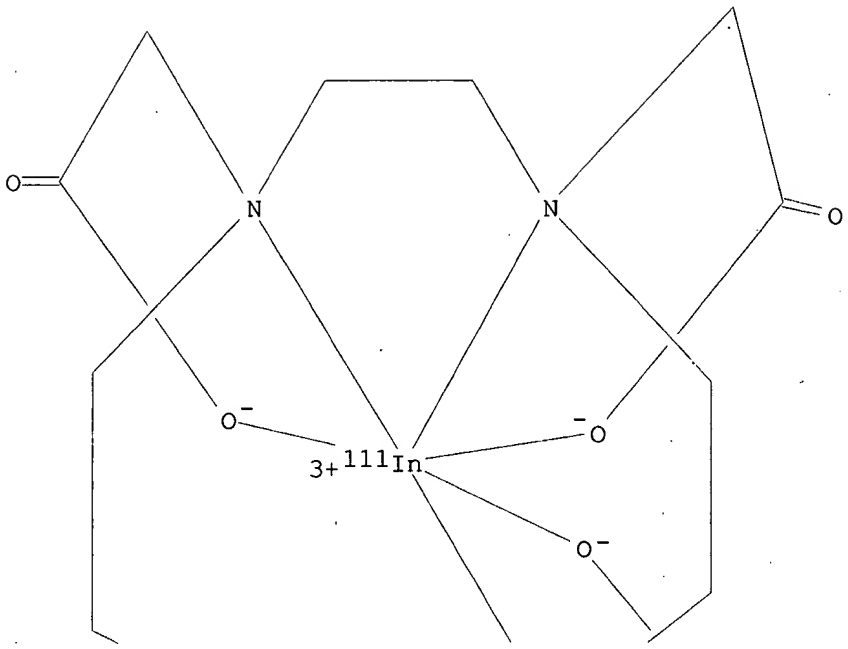
PAGE 1-A



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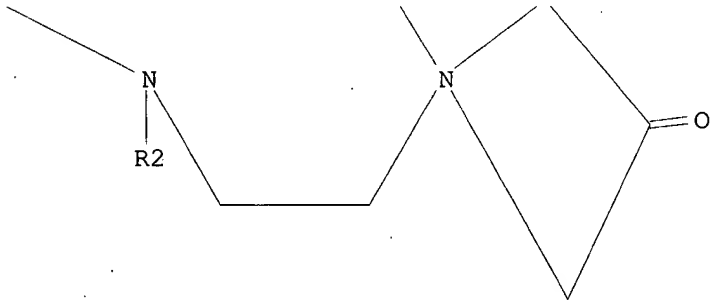
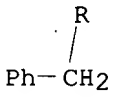
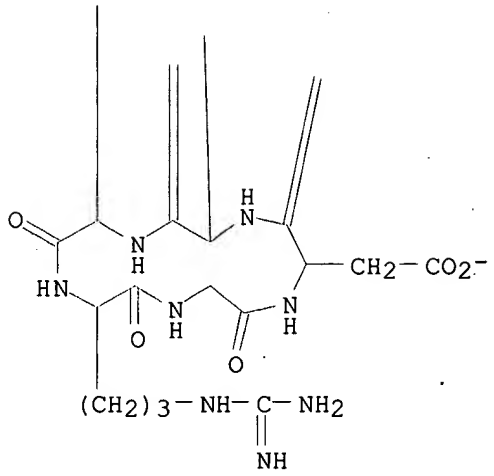




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



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●2 H^+

IT **250612-82-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders and the treatment of cancer in combination therapy)

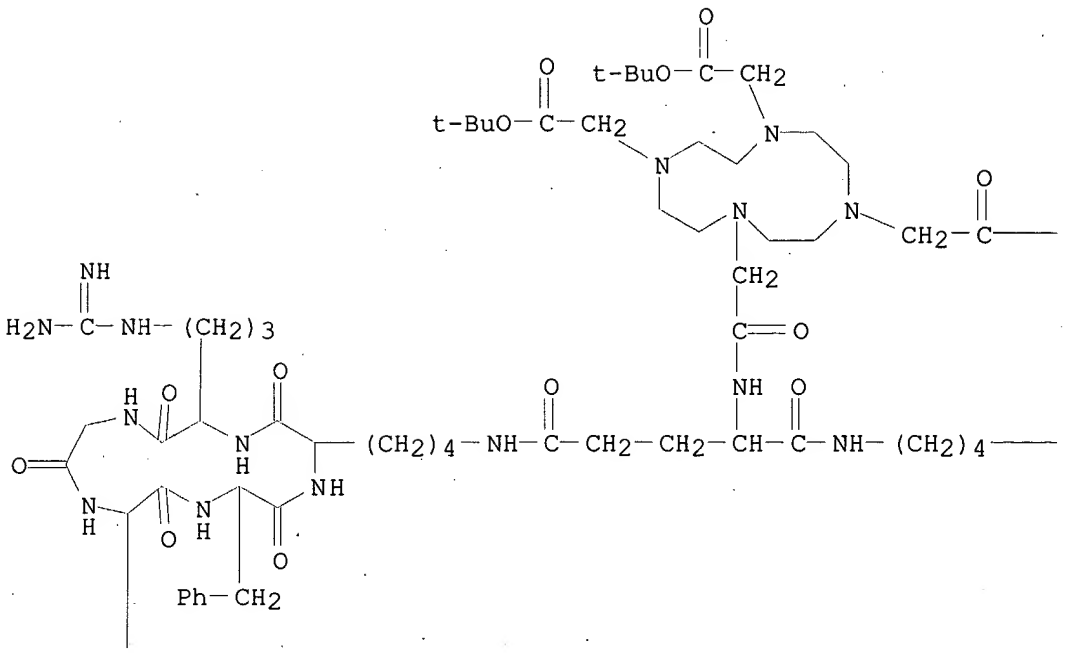
RN 250612-82-9 HCAPLUS

CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 250612-81-8
CMF C87 H137 N23 O23

PAGE 1-A



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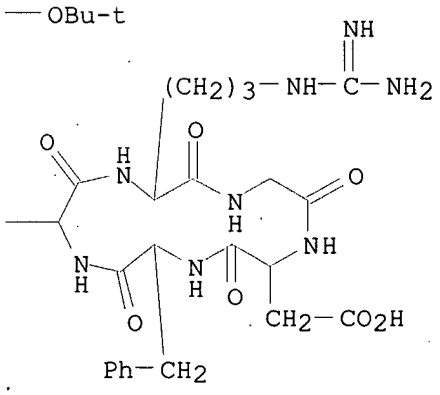

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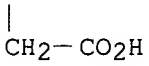
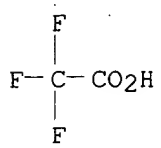


CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **10098-91-6**, y90, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(radioisotope for use with peptide derivs. for the treatment of cancer in combination therapy)
RN 10098-91-6 HCAPLUS
CN Yttrium, isotope of mass 90 (8CI, 9CI) (CA INDEX NAME)

^{90}Y

L62 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:421741 HCAPLUS
DN 135:177368
TI 90Y and 177Lu Labeling of a DOTA-Conjugated Vitronectin Receptor Antagonist Useful for Tumor Therapy
AU **Liu, Shuang**; Cheung, Eric; Ziegler, Marisa C.; Rajopadhye, Milind; Edwards, D. Scott
CS Medical Imaging Division, **DuPont** Pharmaceuticals Company, North Billerica, MA, 01862, USA
SO Bioconjugate Chemistry (2001), 12(4), 559-568
CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
CC 8-9 (Radiation Biochemistry)
AB The 90Y and 177Lu complexes (**RP697** and RP688, resp.) of a DOTA-conjugated vitronectin receptor antagonist (SU015: 2-(1,4,7,10-tetraaza-4,7,10-tris(carboxymethyl)-1-cyclododecyl)acetyl-Glu(cyclo{Lys-Arg-Gly-Asp-D-Phe})-cyclo{Lys-Arg-Gly-Asp-D-Phe}) were prepd. by reacting SU015 with the radiometal chloride in ammonium acetate buffer (pH > 7.2) in the presence of an antioxidant (sodium gentisate, GA). Through a series of radiolabeling expts., it was found that there are many factors influencing the rate of 90Y chelation and the radiolabeling efficiency of SU015. These include the purity of SU015, the pH, reaction temp., and heating time, as well as the presence of trace metal contaminants, such as Ca2+, Fe3+, and Zn2+. The chelation of 90Y by SU015 is slow, so that heating at elevated temps. (50-100 .degree.C) is needed to complete the 90Y-labeling. The rate of 90Y chelation is also dependent on the pH of the reaction mixt. Under optimized radiolabeling conditions (pH 7.2-7.8 and heating at 50-100 .degree.C for 5-10 min), the min. amt. of SU015 required to achieve 95% RCP for **RP697** is .apprx.25 .mu.g for 20 mCi of 90YCl3 corresponding to a SU015:90Y ratio of .apprx.30:1.
ST yttrium lutetium labeling DOTA conjugate vitronectin receptor antitumor
IT Vitronectin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antagonist; 90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)

IT Antitumor agents
Chelation
(90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)
IT 14127-61-8, Ca2+, uses 20074-52-6, Fe3+, uses 23713-49-7, Zn2+, uses
RL: MOA (Modifier or additive use); USES (Uses)
(contaminant; 90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)
IT **250614-38-1P 250614-39-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)
IT 4955-90-2, Sodium gentisate 16434-14-3, 177Lutetium chloride 39271-65-3, 90Yttrium chloride 94790-37-1, Hbtu 137076-54-1 250612-70-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)
IT **250612-06-7P 250612-81-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)
IT 60239-18-1DP, Dota, vitronectin receptor antagonist conjugated with, radiolabeled
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)
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RE
(1) Aumailley, M; FEBS Lett 1991, V291, P50 HCAPLUS
(2) Barrett, J; Bioconjuate Chem 1997, V8, P155 HCAPLUS
(3) Barrett, J; Bioconjugate Chem 1996, V7, P203 HCAPLUS
(4) Blood, C; Biochim Biophys Acta 1990, V1032, P410
(5) Brooks, P; Cell 1994, V79, P1157 HCAPLUS
(6) Brower, V; Nature Biol 1999, V17, P963 HCAPLUS
(7) Cheesman, E; J Labeled Compds Radiopharm 1999, V42, PS164
(8) Clarke, E; Inorg Chim Acta 1991, V190, P27 HCAPLUS
(9) Clarke, E; Inorg Chim Acta 1991, V190, P37 HCAPLUS
(10) Delgado, R; Talanta 1982, V29, P815 HCAPLUS
(11) Drake, C; J Cell Sci 1995, V108, P2655 HCAPLUS
(12) Edwards, D; Bioconjuate Chem 1999, V10, P803 HCAPLUS
(13) Edwards, D; Bioconjuate Chem 1999, V10, P884 HCAPLUS
(14) Edwards, D; Bioconjugate Chem 1997, V8, P146 HCAPLUS
(15) Ferrara, N; Nature Medicine 1999, V5, P1359 HCAPLUS
(16) Folkman, J; Nature Med 1995, V1, P27 HCAPLUS
(17) Gasparini, G; Clinical Can Res 1998, V4, P2625 HCAPLUS
(18) Giannis, A; Angew Chem, Int Ed Engl 1997, V36, P588 HCAPLUS
(19) Harris, T; J Labeled Compds Radiopharm 1999, V42, PS576
(20) Haubner, R; Angew Chem, Int Ed Engl 1997, V36, P1374 HCAPLUS
(21) Haubner, R; J Am Chem Soc 1996, V118, P7461 HCAPLUS
(22) Haubner, R; J Nucl Med 1999, V40, P1061 HCAPLUS
(23) Heppler, A; Chem Eur J 1999, V5, P1974
(24) Horak, E; Lancet 1992, V340, P1120 MEDLINE
(25) Huabner, R; J Labeled Compds Radiopharm 1997, V40, P383
(26) Jang, Y; J Am Chem Soc 1999, V121, P6142 HCAPLUS
(27) Keire, D; Bioconjugate Chem 1999, V10, P454 HCAPLUS
(28) Kline, S; Bioconjugate Chem 1991, V2, P26 HCAPLUS
(29) Kulis, D; J Nucl Med 1998, V39, P2105
(30) Kumar, K; Inorg Chem 1993, V32, P587 HCAPLUS

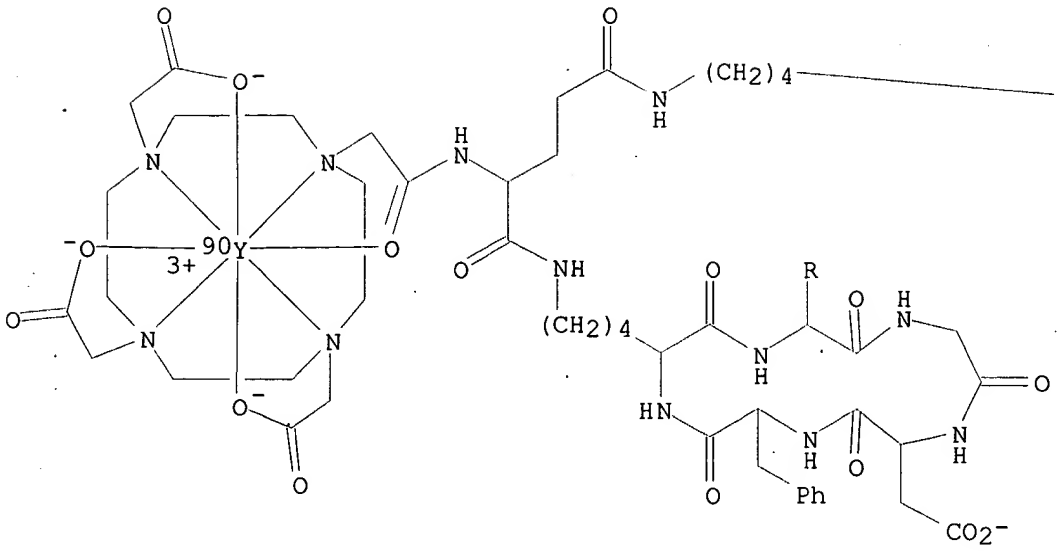
(31) Kumar, K; Inorg Chem 1994, V33, P3567 HCAPLUS
(32) Lewis, M; Bioconjugate Chem 1994, V5, P565 HCAPLUS
(33) Lewis, M; Bioconjugate Chem 1998, V9, P72 HCAPLUS
(34) Li, M; Bioconjugate Chem 1993, V4, P275 HCAPLUS
(35) Liotta, L; Annu Rev Biochem 1986, V55, P1037 HCAPLUS
(36) Liu, S; Bioconjuate Chem 1997, V8, P621 HCAPLUS
(37) Liu, S; Bioconjuate Chem 1998, V9, P583 HCAPLUS
(38) Liu, S; Bioconjugate Chem 1996, V7, P196 HCAPLUS
(39) Liu, S; Bioconjugate Chem 1996, V7, P63 HCAPLUS
(40) Liu, S; Bioconjugate Chem 2000, V11, P113 HCAPLUS
(41) Liu, S; Chem Rev 1999, V99, P2235 HCAPLUS
(42) Liu, S; Inorg Chem 1999, V38, P1326 HCAPLUS
(43) Liu, Y; Pure Appl Chem 1991, V63, P427 HCAPLUS
(44) Mailet, M; Tetrahedron Lett 1998, V39, P2659
(45) Meitar, D; J Clin Oncol 1996, V14, P405 MEDLINE
(46) Moi, M; Anal Chem 1985, V148, P249 HCAPLUS
(47) Moi, M; J Am Chem Soc 1988, V110, P6266 HCAPLUS
(48) Mousa, S; Drugs Future 1998, V23, P51 HCAPLUS
(49) Parker, D; Chem Soc Rev 1990, V19, P271 HCAPLUS
(50) Rajopadhye, M; J Labeled Compounds and Radiopharmaceuticals 1999, V42(suppl), PS234
(51) Rajopadhye, M; J Nucl Med, (abstract no 1141) 2000, V41, P259P
(52) Schubiger, P; Bioconjugate Chem 1996, V7, P165 HCAPLUS
(53) Sherry, A; Inorg Chem 1989, V28, P620 HCAPLUS
(54) Smith-Jones, P; Nucl Med Biol 1998, V25, P181 HCAPLUS
(55) Stimmel, J; Bioconjugate Chem 1995, V6, P219 HCAPLUS
(56) Stimmel, J; Nucl Med Biol 1998, V25, P117 HCAPLUS
(57) van Hinsbergh, V; Ann Oncol 1999, V4, PS60
(58) Volkert, W; Chem Rev 1999, V99, P2269 HCAPLUS
(59) Weinstat-Saslow, D; FASEB 1994, V8, P401 HCAPLUS
(60) Wolf, W; Nucl Med Biol 1986, V13, P319 HCAPLUS

IT **250614-38-1P 250614-39-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)

RN 250614-38-1 HCAPLUS

CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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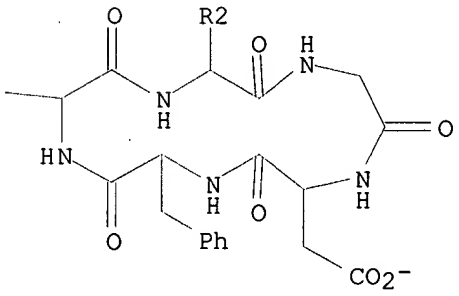

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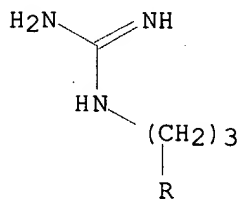
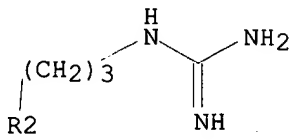
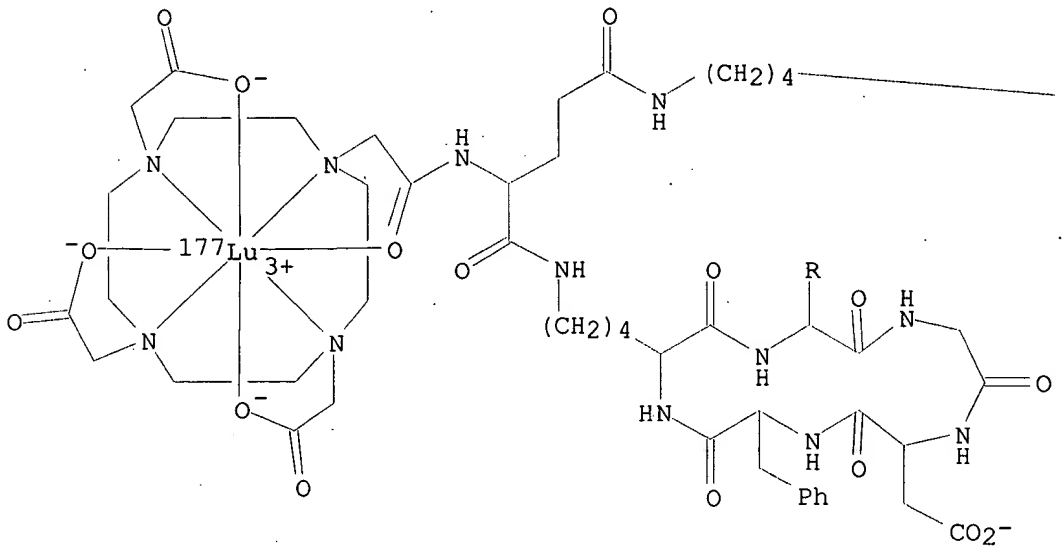




2 H^+

RN 250614-39-2 HCAPLUS
CN Lutetate(2-)-177Lu, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

PAGE 1-A



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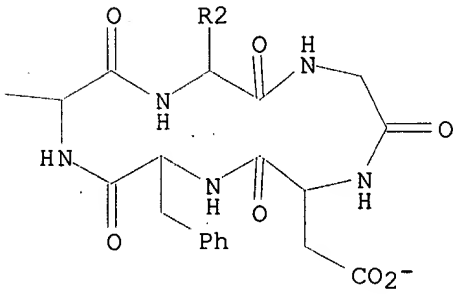

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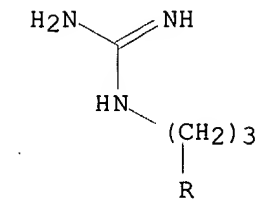
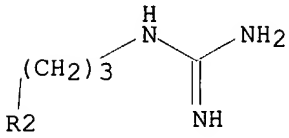




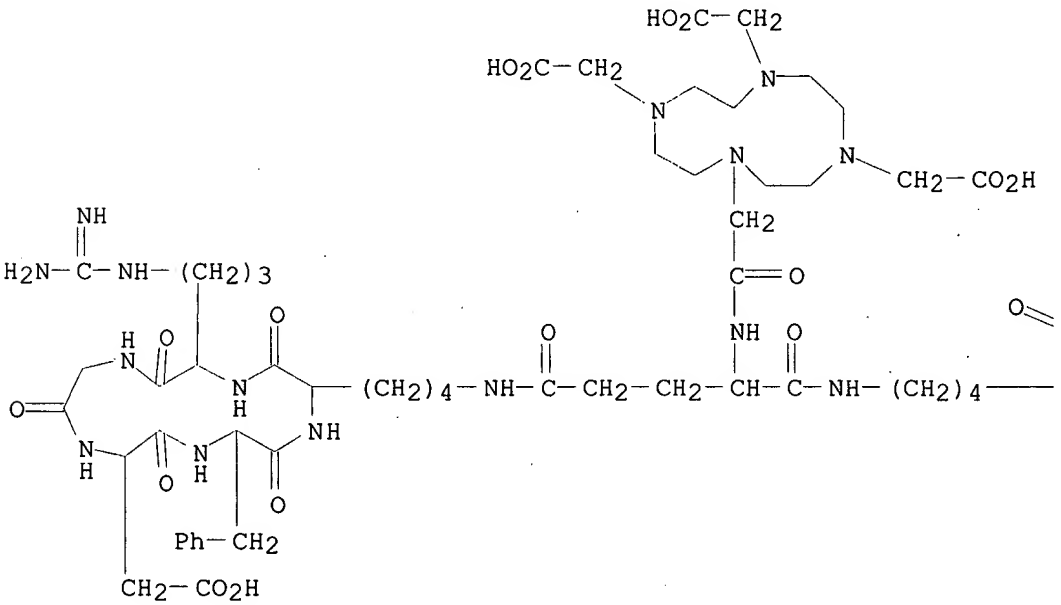
●2 H^+

IT **250612-06-7P 250612-81-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(90Y and 177Lu labeling of DOTA-conjugated vitronectin receptor antagonist useful for tumor therapy)

RN 250612-06-7 HCAPLUS

CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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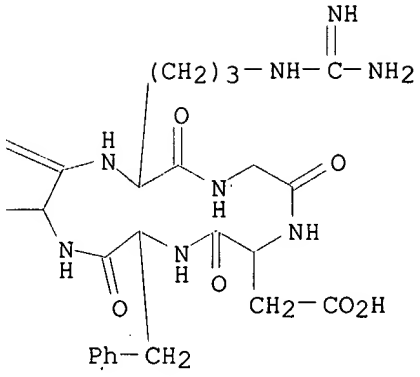
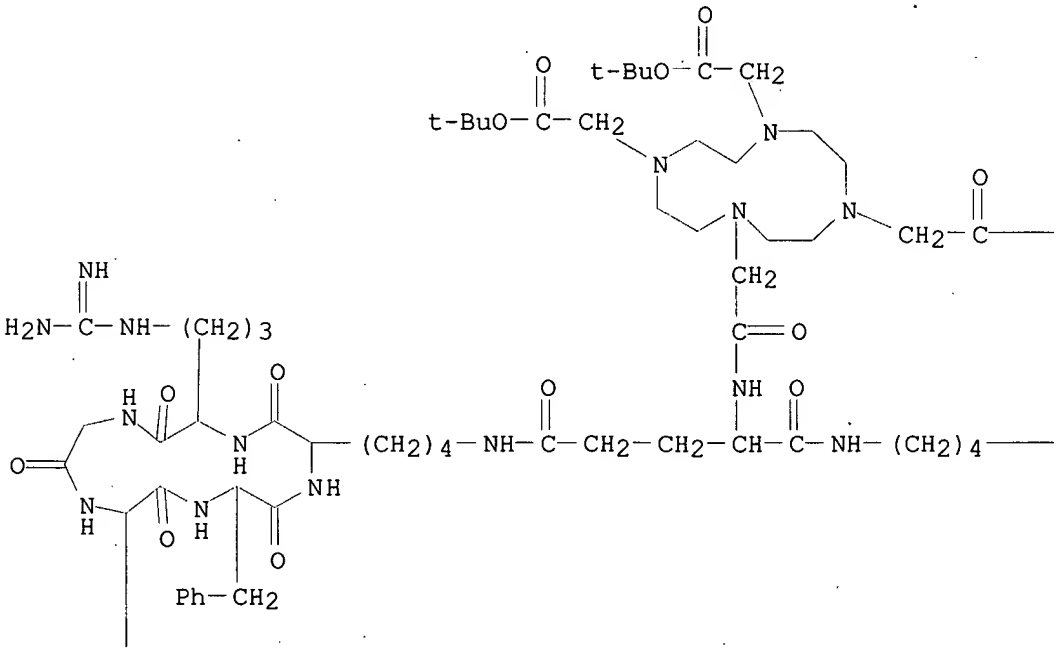


RN 250612-81-8 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

PAGE 1-A



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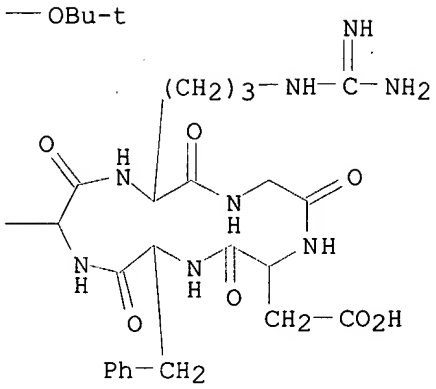

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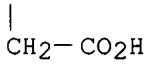

L62 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 2001:421740 HCAPLUS
DN 135:185318
TI Stabilization of 90Y-Labeled DOTA-Biomolecule Conjugates Using **Gentisic Acid** and Ascorbic Acid
AU **Liu, Shuang**; Edwards, D. Scott
CS Medical Imaging Division, **DuPont** Pharmaceuticals Company, North Billerica, MA, 01862, USA
SO Bioconjugate Chemistry (2001), 12(4), 554-558
CODEN: BCCHES; ISSN: 1043-1802
PB American Chemical Society
DT Journal
LA English
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 34, 78
AB Radiolytic degrdn. of radiolabeled compds. is a major challenge for the development of new therapeutic radiopharmaceuticals. The goal of this study is to explore the factors influencing the soln. stability of a 90Y-labeled DOTA-peptide conjugate (**RP697**), including the amt. of total activity, the activity concn., the stabilizer concn., and the storage temp. In general, the rate of radiolytic decompn. of **RP697** is much slower at the lower activity concn. (<4 mCi/mL) than that at the higher concn. (>10 mCi/mL). **RP697** remains relatively stable at the 20 mCi level and room temp. while it decomps. rapidly at the 100 mCi level under the same storage conditions. Radical scavengers, such as **gentisic acid** (GA) and ascorbic acid (AA), were used in combination with the low temp. (-78 .degree.C) to prevent the radiolytic decompn. of **RP697**. It was found that **RP697** remains stable for at least 2 half-lives of 90Y when GA or AA (10 mg for

20 mCi of 90Y) is used as a stabilizer when the radiopharmaceutical compn. is stored at -78 .degree.C. The stabilizer (GA and AA) can be added into the formulation either before or after radiolabeling. The post-labeling approach is particularly useful when the use of a large amt. of the stabilizer interferes with the radiolabeling. The radiopharmaceutical compn. developed in this study can also apply to other 90Y-labeled DOTA-biomol. conjugates. The amt. of the stabilizer used in the radiopharmaceutical compn. and storage temp. should be adjusted according to the sensitivity of the radiolabeled DOTA-biomol. conjugate toward radiolytic decompn.

ST DOTA peptide conjugate stabilization Y90 labeled; yttrium90 DOTA peptide conjugate stabilization; radiolysis Y90 DOTA peptide conjugate stabilization

IT Radiolysis
Stabilizing agents
(stabilization of 90Y-labeled DOTA-biomol. conjugates using **gentisic acid** and ascorbic acid)

IT **250614-38-1P**
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(stabilization of 90Y-labeled DOTA-biomol. conjugates using **gentisic acid** and ascorbic acid)

IT 134-03-2, Sodium ascorbate 4955-90-2, Sodium gentisate
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(stabilization of 90Y-labeled DOTA-biomol. conjugates using **gentisic acid** and ascorbic acid)

IT 39271-65-3, yttrium 90 chloride **250612-06-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(stabilization of 90Y-labeled DOTA-biomol. conjugates using **gentisic acid** and ascorbic acid)

RE.CNT 30 . THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Ballinger, J; Eur J Nucl Med 1981, V6, P153 HCAPLUS
(2) Barrett, J; Bioconjuate Chem 1996, V7, P203 HCAPLUS
(3) Barrett, J; Bioconjuate Chem 1997, V8, P155 HCAPLUS
(4) Chakrabarti, M; J Nucl Med 1996, V37, P1384 HCAPLUS
(5) Cheesman, E; J Labelled Compd Radiopharm 1999, V42, PS164
(6) Edwards, D; Bioconjuate Chem 1997, V8, P146 HCAPLUS
(7) Edwards, D; Bioconjuate Chem 1999, V10, P803 HCAPLUS
(8) Edwards, D; Bioconjuate Chem 1999, V10, P884 HCAPLUS
(9) Edwards, D; Transition Met Chem (Dordrecht, Neth) 1997, V22, P425 HCAPLUS
(10) Garrison, W; Chem Rev 1987, V87, P381 HCAPLUS
(11) Harris, T; J Labelled Compd Radiopharm 1999, V42, PS576
(12) Haubner, R; J Am Chem Soc 1996, V118, P7461 HCAPLUS
(13) Heeg, M; Acc Chem Res 1999, V32, P1053 HCAPLUS
(14) Knapp, F; Anticancer Res 1997, V17, P1783 HCAPLUS
(15) Kulis, D; J Nucl Med 1998, V39, P2105
(16) Liu, S; Bioconjuate Chem 1996, V7, P196 HCAPLUS
(17) Liu, S; Bioconjuate Chem 1997, V8, P621 HCAPLUS
(18) Liu, S; Bioconjuate Chem 1998, V9, P583 HCAPLUS
(19) Liu, S; Bioconjugate Chem 1996, V7, P63 HCAPLUS
(20) Liu, S; Bioconjugate Chem 2000, V11, P113 HCAPLUS
(21) Liu, S; Bioconjugate Chem 2001, V12, P7 HCAPLUS
(22) Liu, S; Bioconjugate Chem 2001, V12, Pxxx
(23) Liu, S; Bioconjugate Chem (in press) 2001
(24) Liu, S; Chem Rev 1999, V99, P2235 HCAPLUS
(25) Liu, S; Inorg Chem 1999, V38, P1326 HCAPLUS
(26) Rajopadhye, M; J Labelled Compd Radiopharm 1999, V42(Suppl), PS234
(27) Rajopadhye, M; J Nucl Med, abstract #1141 2000, V41, P259P
(28) Salako, Q; J Nucl Med 1998, V39, P667 HCAPLUS
(29) Tofe, A; J Nucl Med 1980, V21, P366 HCAPLUS
(30) Volkert, W; Chem Rev 1999, V99, P2269 HCAPLUS

IT **250614-38-1P**
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(stabilization of 90Y-labeled DOTA-biomol. conjugates using **gentisic acid** and ascorbic acid)
RN 250614-38-1 HCAPLUS
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

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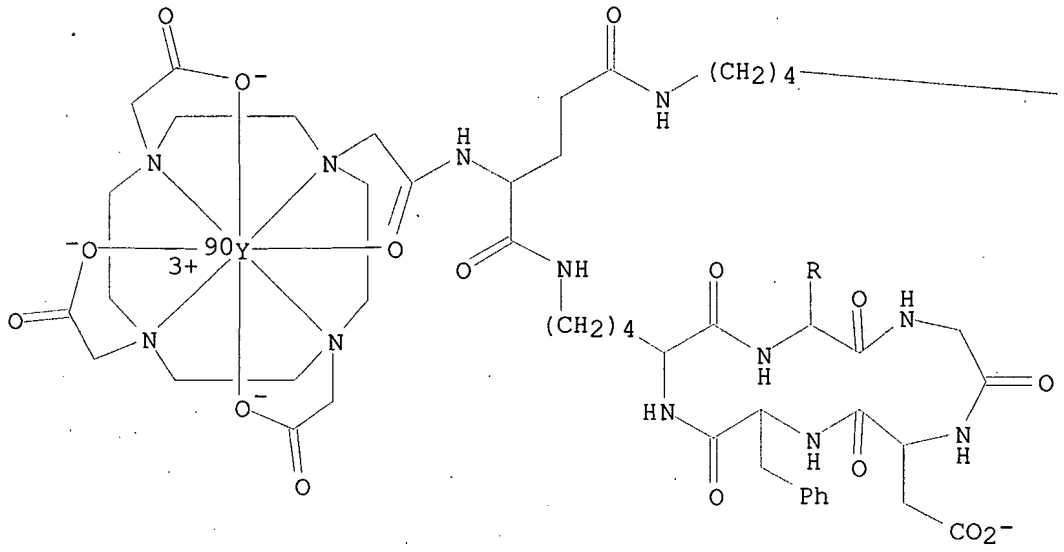

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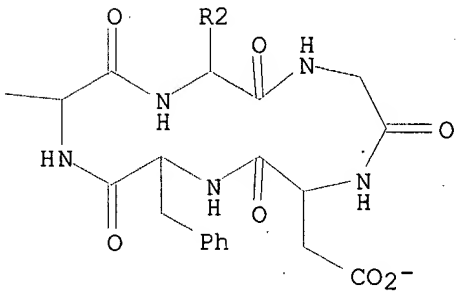

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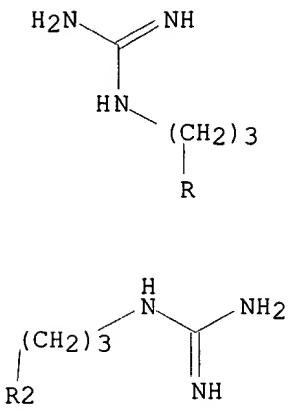

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RL: RCT (Reactant); RACT (Reactant or reagent)
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RN 250612-06-7 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

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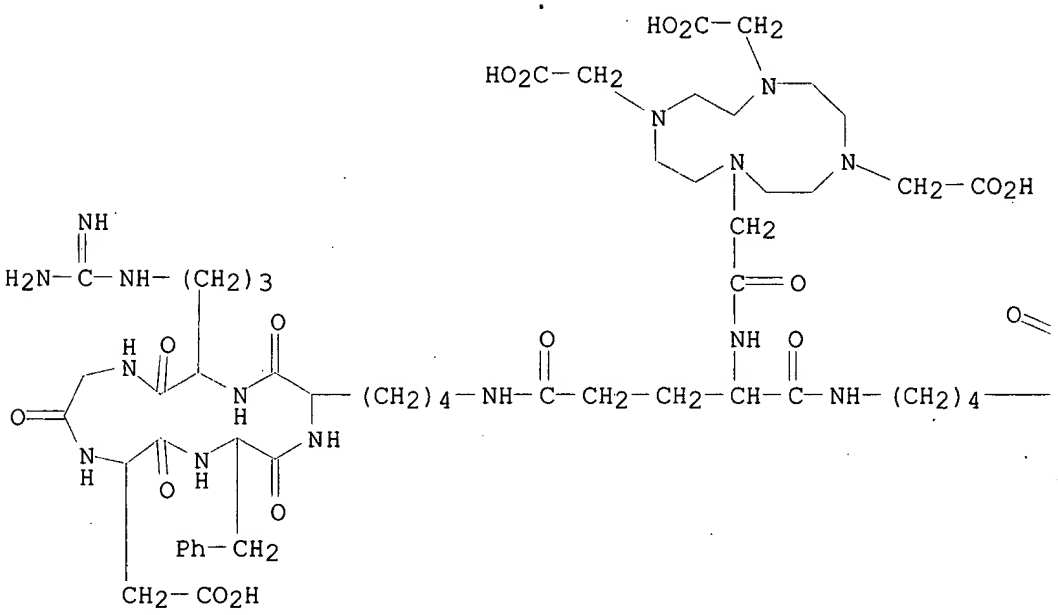

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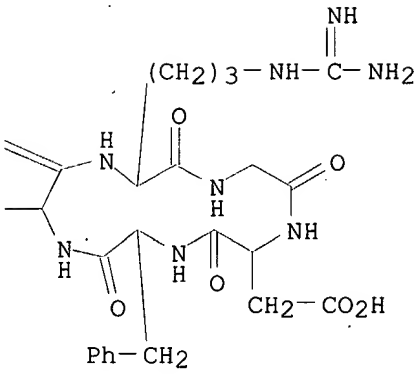

L62 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2003 ACS
AN 1999:736515 HCAPLUS
DN 131:351678
TI Preparation of peptide derivatives for the imaging of angiogenic disorders
IN Rajopadhye, Miland; Edwards, D. Scott; Harris, Thomas D.; Heminway, Stuart J.; **Liu, Shuang**; Singh, Prahlad R.
PA **Du Pont** Pharmaceuticals Company, USA
SO PCT Int. Appl., 213 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K049-00
CC 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 8; 78
FAN.CNT 7

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	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
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	US 6322770	B1	20011127	US 1999-281207	19990330
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	US 1998-112715P	P	19981218		

US 1998-112732P P 19981218
US 1998-112829P P 19981218
US 1998-112831P P 19981218
WO 1999-US6826 W 19990329

OS MARPAT 131:351678

AB Compds. (Q)d-Ln-Ch (Q is a peptide, d= 1-10, Ln is a linking group, Ch is a metal-bonding unit) were prepd. for use in the diagnosis and treatment of cancer, methods of imaging tumors in a patient, and methods of treating cancer in a patient. The present invention also provides novel compds. useful for monitoring therapeutic angiogenesis treatment and destruction of new angiogenic vasculature. Thus, cyclo{Arg-Gly-Asp-D-Tyr(N-[2-[[[5-[carbonyl]-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid]-3-aminopropyl)-Val} was prepd. by acylation of cyclo{Arg-Gly-Asp-D-Tyr(3-aminopropyl)-Val} with 2-[[[5-[[(2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]-2-pyridinyl]hydrazono]methyl]benzenesulfonic acid monosodium salt and converted into radiopharmaceutical 99mTc(VnA)(tricine)(phosphine), where VnA represents the vitronectin receptor antagonist.

ST cyclic peptide radiolabeled prepn imaging angiogenic disorder

IT Imaging
(NMR; prepn. of peptide derivs. for the imaging of angiogenic disorders)

IT Peptides, preparation
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(cyclic; prepn. of peptide derivs. for the imaging of angiogenic disorders)

IT Blood vessel
(formation; prepn. of peptide derivs. for the imaging of angiogenic disorders)

IT Angiogenesis
Antitumor agents
Imaging
Rheumatoid arthritis
Scintigraphy
Tomography
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

IT Receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

IT 108-30-5, reactions 288-88-0, 1H-1,2,4-Triazole 5437-45-6, Benzyl bromoacetate 5704-04-1, Tricine 23911-26-4, Diethylenetriaminepentaacetic dianhydride 63995-70-0, Tppts 63995-75-5, TPPMS 64018-22-0, TPPDS 122555-91-3 161552-03-0 180468-25-1 186305-11-3 194920-62-2 250612-83-0D, resin-bound 250612-84-1D, resin-bound 250612-85-2D, resin-bound 250612-86-3 250612-87-4 250612-88-5D, resin-bound 250612-89-6D, resin-bound 250612-90-9D, resin-bound 250612-92-1D, resin-bound 250612-93-2D, resin-bound 250612-94-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of peptide derivs. for the imaging of angiogenic disorders)
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250612-01-2P 250612-02-3P 250612-03-4P 250612-04-5P 250612-05-6P
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250612-10-3P 250612-11-4P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
IT 288-88-0DP, 1H-1,2,4-Triazole, technetium-99m cyclopeptide tricine complexes 5704-04-1DP, Tricine, technetium-99m cyclopeptide triazole complexes 14133-76-7DP, cyclopeptide tricine triazole complexes, preparation 250611-72-4DP, technetium-99m tricine triazole complex
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RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
IT 63-89-8 7091-44-3 250612-27-2
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
IT **250612-82-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-82-9 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris[2-(1,1-dimethylethoxy)-2-oxoethyl]-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

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CRN 250612-81-8
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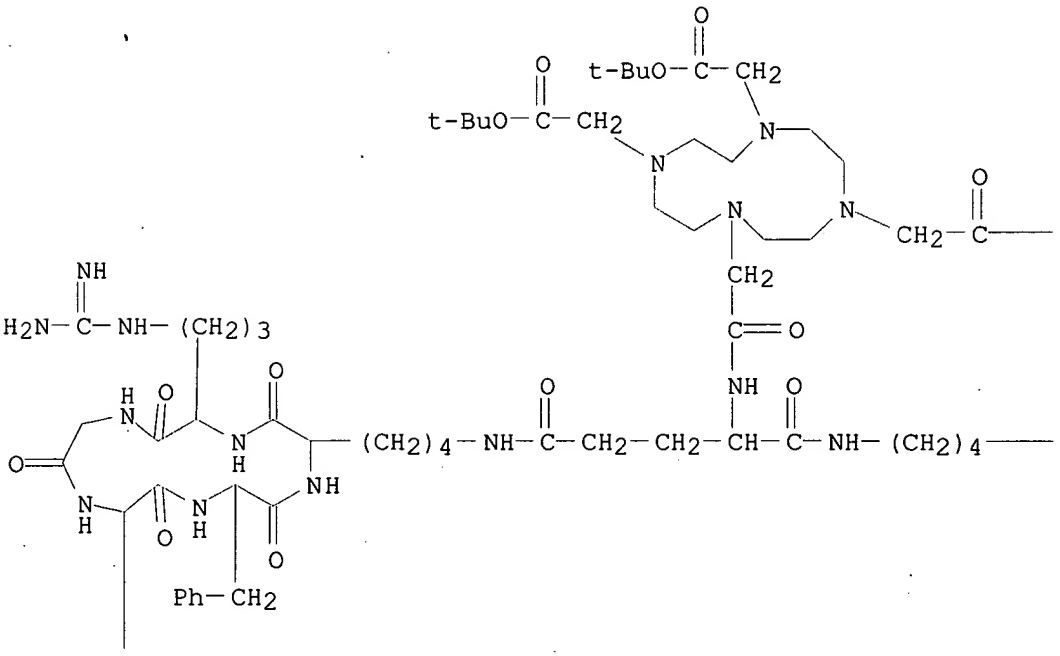

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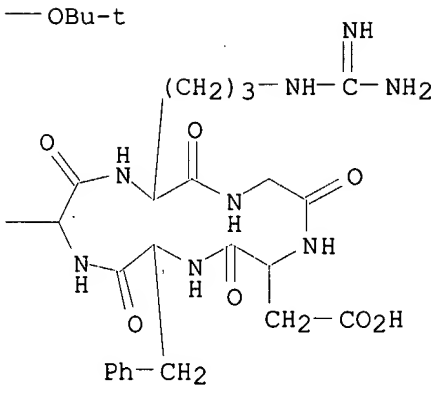

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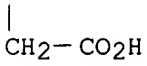

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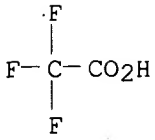

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RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250612-06-7 HCAPLUS
CN Cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysyl), 5,5'-[N-[[4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododec-1-yl]acetyl]-L-glutamoyl]bis- (9CI) (CA INDEX NAME)

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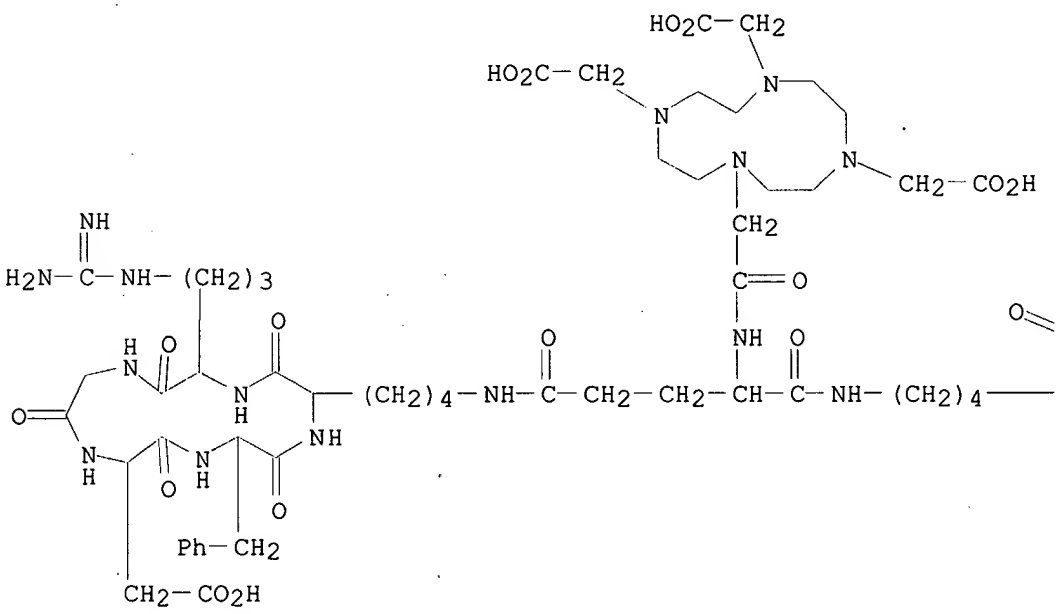

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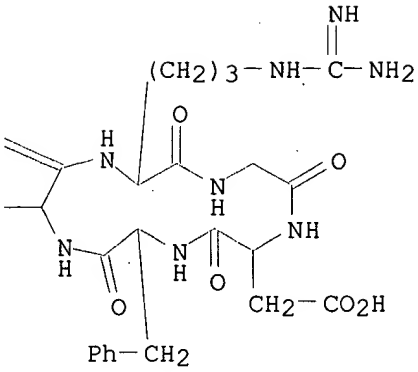

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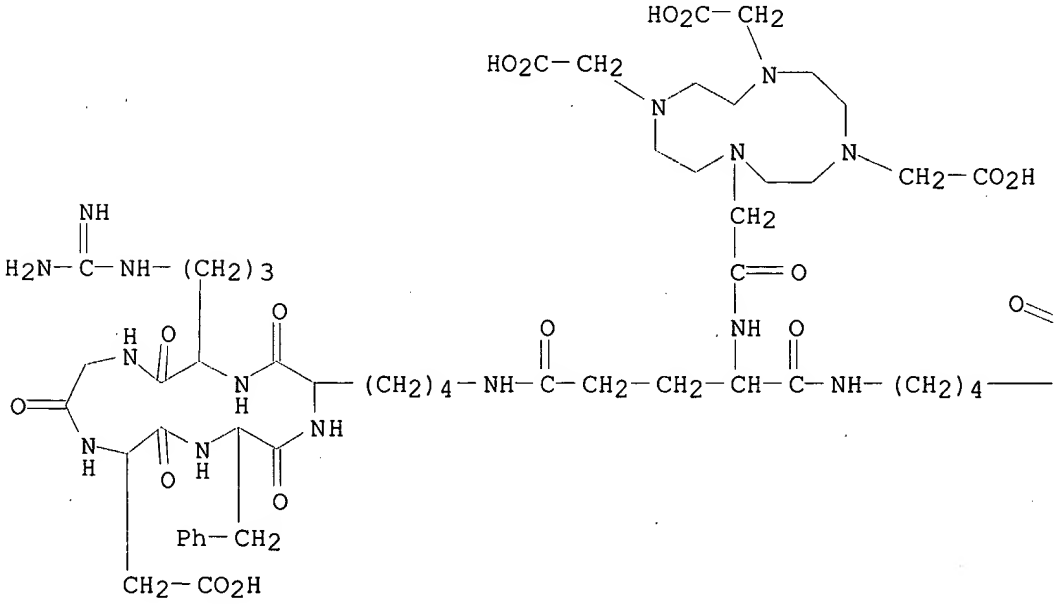

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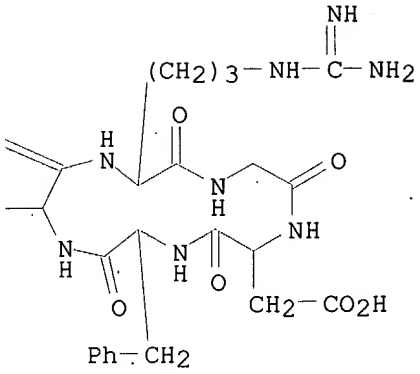

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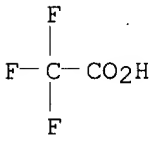

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RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of peptide derivs. for the imaging of angiogenic disorders)
RN 250614-38-1 HCAPLUS
CN Yttrate(2-)-90Y, [[5,5'-[N-[[4,7,10-tris[(carboxy-.kappa.O)methyl]-1,4,7,10-tetraazacyclododec-1-yl-.kappa.N1,.kappa.N4,.kappa.N7,.kappa.N10]acetyl-.kappa.O]-L-glutamoyl]bis[cyclo(L-arginylglycyl-L-.alpha.-aspartyl-D-phenylalanyl-L-lysylato)]](5-)]-, dihydrogen (9CI) (CA INDEX NAME)

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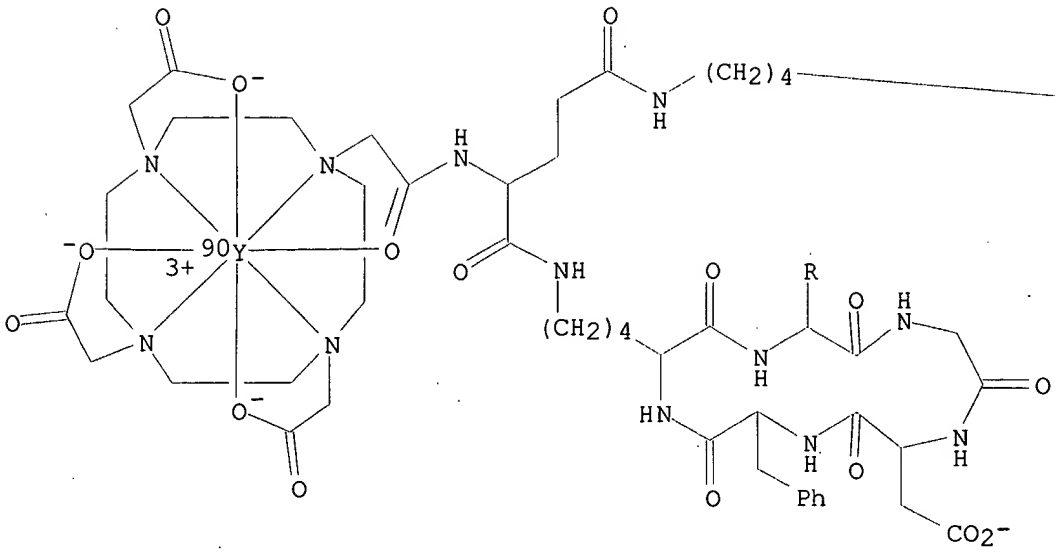

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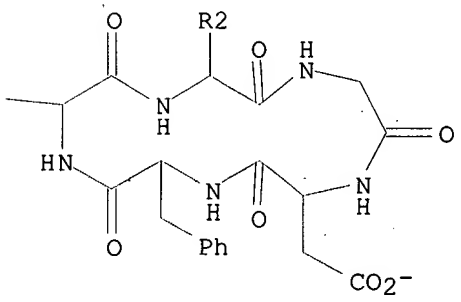

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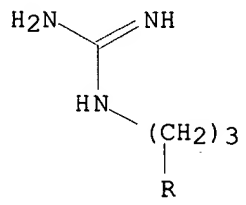

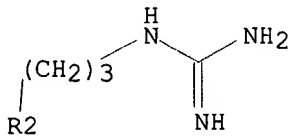

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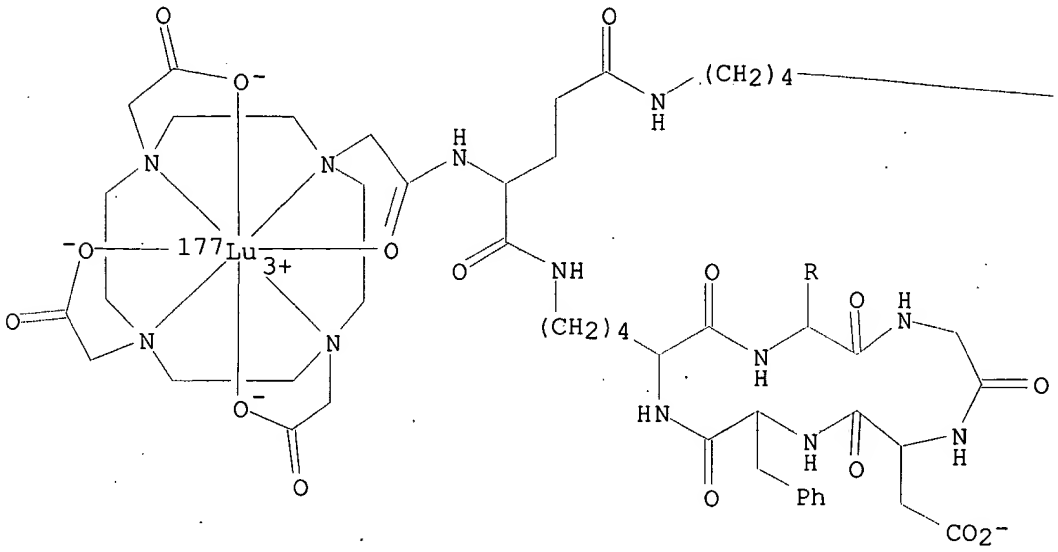

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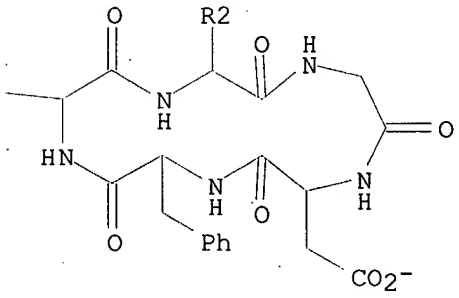

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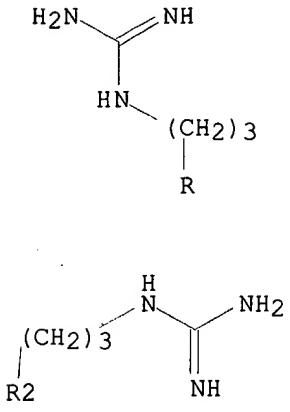

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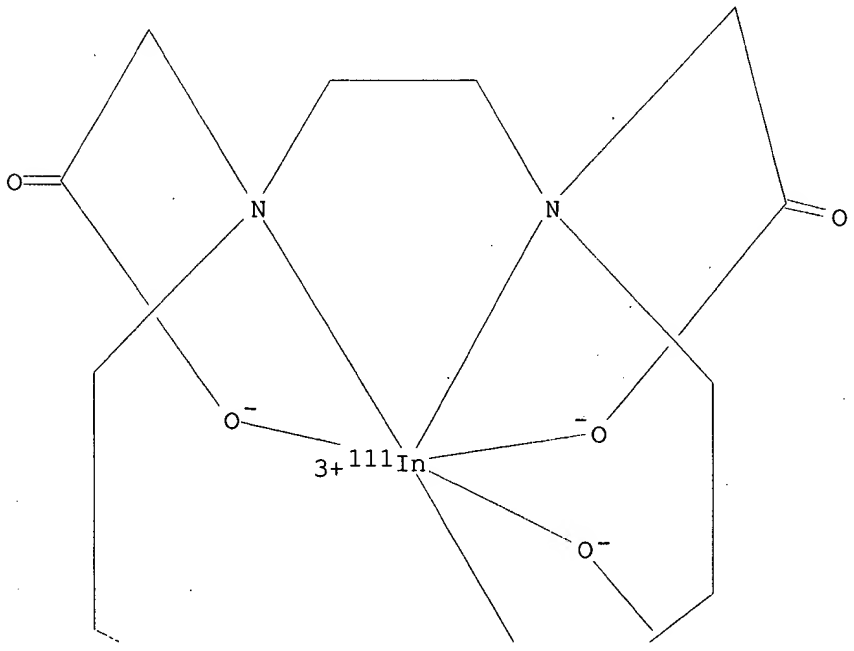

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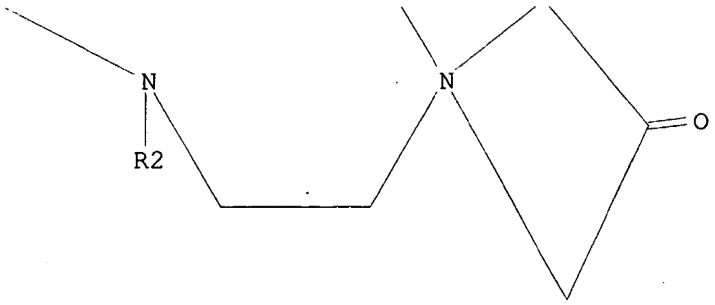
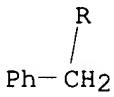
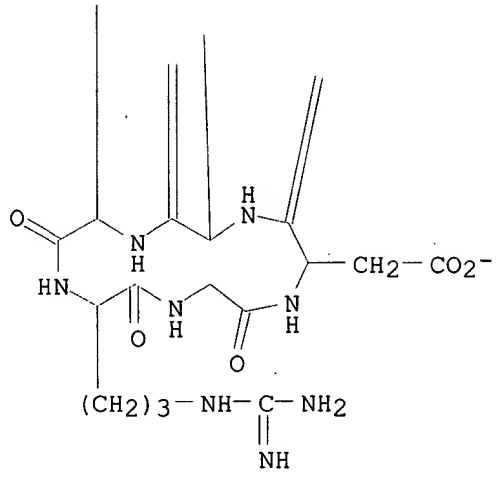




* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *



PAGE 4-A

2 H^+

=> d his

(FILE 'HOME' ENTERED AT 06:55:24 ON 04 JUN 2003)

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                SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 06:55:37 ON 04 JUN 2003
                E US20020122768/PN
L1            1 S E3
                E WO2001-US21261/AP,PRN
L2            1 S E3,E4
                E US2000-216396/AP,PRN
L3            1 S E5
L4            1 S L1-L3
L5         1653 S GENTISIC ACID
L6          549 S TRIHYDROXYBENZOIC ACID
L7           30 S TRIHYDROXY BENZOIC ACID
L8            1 S TRI HYDROXY BENZOIC ACID
L9            6 S TRI HYDROXYBENZOIC ACID
L10           1 S L4 AND L5-L9
                SEL RN

     FILE 'REGISTRY' ENTERED AT 06:58:56 ON 04 JUN 2003
L11         161 S E1-E161
L12          11 S L11 AND SQL/FA
L13         150 S L11 NOT L12
L14           1 S 490-79-9
L15          23 S L13 AND 46.150.18/RID AND 1/NR
L16           2 S L15 AND C7H6O5
L17          13 S C7H6O5/MF AND 46.150.18/RID
L18           8 S L17 NOT (14C# OR D/ELS OR ALDEHYDE)
L19           8 S L16,L18
L20          46 S C7H6O4/MF AND 46.150.18/RID
L21          23 S L20 AND BENZOIC ACID
L22          14 S L21 NOT RIS/CI
L23           9 S L22 NOT (17O OR HYDROPEROXY)
L24           9 S L14,L23
L25           5 S L13 AND NC2NC2NC2NC2/ES
L26         122 S L13 NOT L14-L25
L27          35 S L26 AND N>=4
L28           1 S L12 AND Y/ELS
L29           1 S L12 AND C75H113N23O23
L30           1 S 250612-06-7
L31           1 S 250612-06-7/CRN
L32           3 S L28-L31
L33           9 S L12 NOT L32
L34           1 S L33 AND NC2NC2NC2NC2/ES
L35           4 S L32,L34
L36           8 S L33 NOT L35
L37           1 S 10098-91-6
L38         125 S Y/MF
L39          84 S L38 AND ISOTOPE
L40          41 S L38 NOT L39
                E KRGDF/SQEP
L41         138 S E3
L42          42 S L41 AND MULTICHAIN/NTE
L43          28 S L42 AND 10/SQL
L44           6 S L43 AND (C75H108INN23O23 OR C75H113N23O23 OR C87H137N23O23 OR
L45           7 S L35,L44

     FILE 'HCAOLD' ENTERED AT 07:21:47 ON 04 JUN 2003
L46           0 S L45

     FILE 'USPATFULL, USPAT2' ENTERED AT 07:21:52 ON 04 JUN 2003
L47          14 S L45
L48           2 S L47 AND L37
L49           2 S L47 AND L39,L40
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L50             1 S L47 AND L24
L51             4 S L47 AND (LIU ? OR BARRETT ? OR CARPENTER ?)/AU
L52            14 S L47-L51

     FILE 'HCAPLUS' ENTERED AT 07:26:38 ON 04 JUN 2003
L53             8 S L45
L54             3 S L53 AND L37,L39,L40
L55             1 S L53 AND L24
L56             2 S L5-L9 AND L53
L57             8 S L53 AND (LIU ? OR BARRETT ? OR CARPENTER ?)/AU
L58             7 S L53 AND (BRISTOL? OR MYER? OR MEYER? OR SQUIB? OR DUPONT? OR
L59             8 S L53-L58

     FILE 'REGISTRY' ENTERED AT 07:29:05 ON 04 JUN 2003

     FILE 'USPATFULL, USPAT2' ENTERED AT 07:29:35 ON 04 JUN 2003
L60             0 S RP697 OR RP 697

     FILE 'HCAPLUS' ENTERED AT 07:38:31 ON 04 JUN 2003
L61             2 S L60
L62             8 S L59,L61
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